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THIRTY-SECOND

ANNUAL REPORT

OF THE

FISHERY BOARD FOR SCOTLAND

Being for the Year 1913.

Presented to Parliament by Command of His Majesty.

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THIRTY-SECOND ANNUAL REPORT.

TO THE RIGHT HONOURABLE
T. M'KINNON WOOD, M.P.,
His Majesty's Secretary for Scotland.

FISHERY BOARD FOR SCOTLAND,
EDINBURGH, 30*th April* 1914.

SIR,—

In terms of the Act 45 and 46 Vict., c. 78, we, the Fishery Board for Scotland, have the honour to present this, our Thirty-second Annual Report, being for the year 1913 :—

PART I.—GENERAL STATEMENT.

Again it is our duty to report a successful year in the fishing industry of Scotland.

The sea fish of all kinds landed within the year amounted to 7,828,350 cwts., of the value of £3,997,717. This is an increase in value over the preceding year of £341,539, but a decrease in quantity of 758,756 cwts. Thus while the previous year's catch exceeded the result in quantity, 1913 marks the highest point in value yet attained in the fisheries of Scotland.

The causes that led to the increase in value in face of the shorter catch are explained later on (page xxii).

This result was obtained by 8991 fishing vessels manned by crews amounting to 38,262.

We give below in summary form the means of capture employed and the resultant catch since 1898.

[TABLE

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SUMMARY OF MEANS OF CAPTURE AND RESULT.

Year.	Number of Vessels.	Value of Boats and Gear.	Total Catch.	
			Quantity.*	Value.
		£	Cwts.	£
1898	11,576	2,029,384	6,558,768	1,879,866
1899	11,245	2,383,776	5,145,076	2,189,933
1900	11,275	2,711,877	5,369,265	2,325,994
1901	11,201	3,001,301	6,385,170	2,238,310
1902	11,097	3,212,455	6,866,028	2,502,668
1903	11,008	3,448,168	6,518,808	2,401,287
1904	10,891	3,431,284	7,947,829	2,231,102
1905	10,581	3,304,695	7,856,310	2,649,148
1906	10,554	4,117,549	7,593,369	2,977,583
1907	10,365	4,857,816	9,018,153	3,149,127
1908	10,078	5,223,149	8,645,252	2,512,162
1909	9,889	5,291,533	7,423,185	2,889,107
1910	9,724	5,439,857	8,709,655	3,100,387
1911	9,543	5,628,087	8,511,974	3,127,929
1912	9,290	5,777,102	8,587,106	3,656,178
1913	8,991	6,035,952	7,828,350	3,997,717

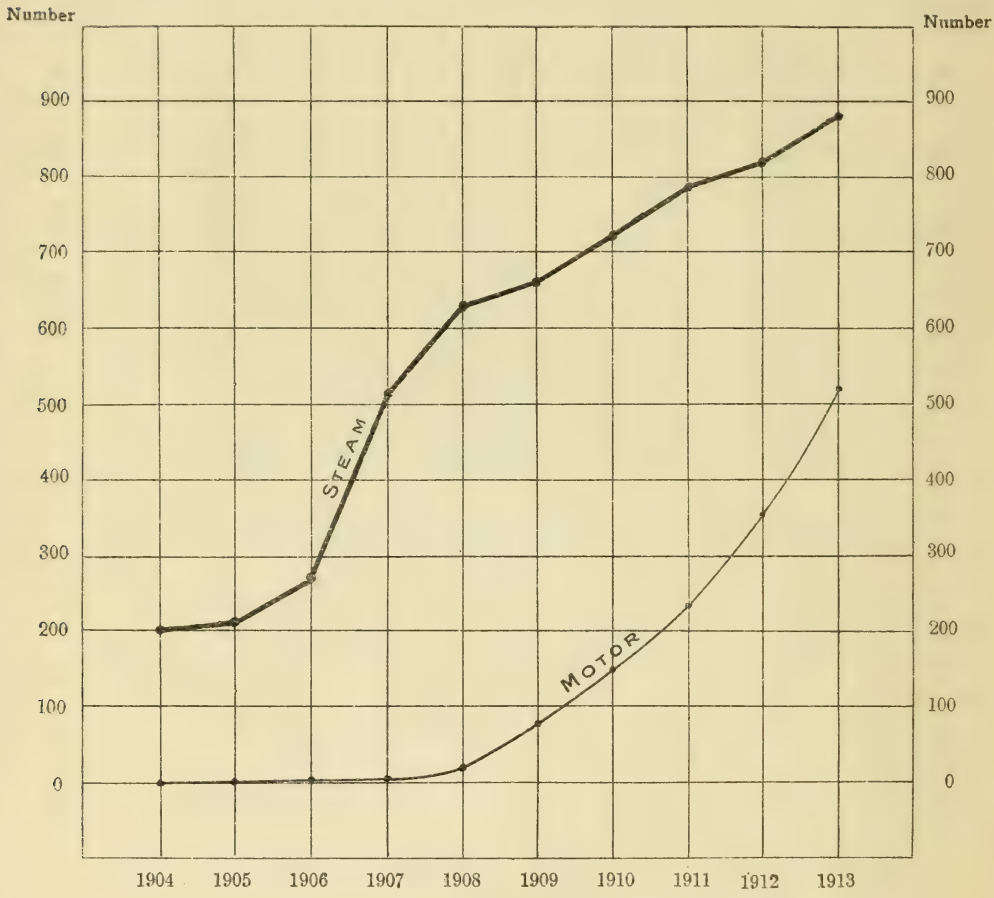
* Excluding shell-fish, which are sold partly by number (*e.g.*, oysters) and partly by weight (*e.g.*, mussels), and have no common measure except value.

The decrease in the total number of vessels shows the rapidity with which the sailing boats are being superseded by or transformed into vessels propelled by steam or motor power and manned by larger crews.

Our anticipation in last Annual Report of a large increase in the number of power-propelled fishing vessels has been amply fulfilled. During 1913, 109 steam and 167 motor boats were added to the fishing fleet, and since the close of the year a further considerable addition has been made. The resources of the local builders have been taxed to the utmost and even outrun to meet the demand in the case of steam. Fishermen have also purchased second-hand drifters in England and elsewhere.

With regard to motor power not much progress is being made with its introduction as an auxiliary motive power into the existing fleet of herring sail boats. There are doubtless good reasons for this. The two most obvious are (1) the fact that no new herring sail boats have been built for several years, while the usual proportion are going out of action by efflux of time, and (2) the fact that no satisfactory application of the propulsive motor power of the vessel to the hauling of the herring nets has yet been devised. There are other reasons of a subsidiary character, but the above are the most outstanding.

CHART SHOWING THE INCREASE OF STEAM DRIFTERS AND LINERS AND MOTOR BOATS.



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On the other hand, the installation of motor engines into the smaller boats engaged in the inshore fisheries has been proceeding apace with undoubted advantage to all concerned. By far the greater number of the year's increase of 167 belong to this class.

On the opposite page we give a diagram showing in graphic form the increase in the steam and motor fishing fleets of Scotland since 1905

Changes in Means of Capture.

As contributors to the herring supplies power-propelled vessels made a further advance upon the position so long held by sailing vessels. The rapidity of the transition which is taking place in this respect is well exemplified in the following table.

Table showing the Percentage of the Total Catch of Herrings obtained by Steam, Motor, and Sailing Boats respectively in each year since 1906 :—

Year.	Steam Vessels. Percentage.	Motor Vessels. Percentage.	Sailing Vessels. Percentage.
1906 . . .	31	—	69
1907 . . .	45	—	55
1908 . . .	50	—	50
1909 . . .	54	—	46
1910 . . .	56	4	40
1911 . . .	59	5	36
1912 . . .	61	6	33
1913 . . .	64	8	28

From the above table it will be seen that the proportions of the total catch of herrings contributed by steamers and sailing boats respectively have been more than reversed within the space of eight years.

DIFFERENT FISHERIES.

1. *HERRING FISHERY—GENERAL.*

The herring catch of 1913 amounted to 4,449,323 cwts. in quantity and £2,087,754 in value, as compared with 5,201,300 cwts. and £1,910,533 in 1912. This shows a decrease of 751,977 cwts. but an increase in value of £177,221 over the previous year, and in point of value constitutes the high-water mark of the herring fishery of Scotland. The price per cwt. paid to the fishermen also sets up a new record.

The following table gives the total results of the Scottish herring fishery since 1899 :—

Year.	Quantity. Cwts.	Value. £	Average Price per Cwt.
1899 . . .	3,207,078	1,143,296	7/0¼
1900 . . .	3,520,216	1,243,407	7/
1901 . . .	4,338,635	1,061,034	4/10¾
1902 . . .	4,753,944	1,360,492	5/8½
1903 . . .	4,279,485	1,244,656	5/9¾
1904 . . .	5,432,494	1,017,541	3/9
1905 . . .	5,342,777	1,343,080	5/
1906 . . .	4,979,848	1,649,163	6/7½
1907 . . .	6,253,341	1,795,650	5/9
1908 . . .	5,690,114	1,151,644	4/0½
1909 . . .	4,541,297	1,569,743	6/11
1910 . . .	5,687,226	1,594,308	5/7
1911 . . .	5,036,484	1,505,334	6/
1912 . . .	5,201,300	1,910,533	7/4½
1913 . . .	4,449,323	2,087,754	9/4½

Scottish Boats in England and Ireland.

But the operations of the Scottish herring fishermen are not limited to Scotland. They participate to an important extent in the herring fishery of both England and Ireland.

The following table shows the development and dimensions of such participation :—

Year.	English Fishing.			Irish Fishing.		
	No. of Boats.	Catch.	Value.	No. of Boats.	Catch.	Value.
		Cwts.	£		Cwts.	£
1899	679	822,500	242,460	..	17,500	6,240
1900	910	1,050,931	259,436	58	31,150	9,490
1901	951	850,941	197,126	104	45,619	15,718
1902	1009	1,445,797	356,428	158	35,157	12,456
1903	1184	1,166,928	213,462	218	60,928	21,967
1904	996	1,575,687	249,974	280	59,830	22,035
1905	1207	1,539,672	485,278	439	59,646	30,780
1906	1292	1,210,236	477,106	307	53,559	35,556
1907	1340	1,892,105	338,899	252	47,753	23,158
1908	1221	1,741,675	454,230	291	91,528	54,898
1909	1259	1,528,628	467,866	346	122,278	36,036
1910	1257	1,243,207	456,528	200	153,819	42,011
1911	1039	1,798,824	549,342	237	264,931	65,339
1912	1099	2,329,373	701,895	258	103,030	33,808
1913	1163	2,488,183	763,256	159	102,074	40,572

These figures are not included in the statistics already given of the Scottish fisheries. Though the fish are landed by Scottish boats the returns are included in the fishery statistics of the particular country in which the fish are landed.

As an evidence of the enterprise of the Scottish fishermen it may be stated in this connection that the proportion of the total herring catch of England and Ireland landed in those countries by Scottish fishermen during 1913 amounted to 34 and 25 per cent. respectively.

Cured Herrings Exported.

The total export of cured herrings for 1912 was 1,385,323 barrels. The principal market is on the Continent of Europe. The greater part of the export goes to the two countries of Germany and Russia. The following is the rate of export to each since 1899 :—

Year.	To Germany.*	To Russia.
	Barrels.	Barrels.
1899	714,230	166,873
1900	769,126	172,462
1901	998,240	233,129
1902	1,049,502	292,987
1903	794,711	303,202
1904	1,095,683	384,443
1905	1,057,315	430,554
1906	1,025,886	424,200
1907	1,186,100	627,100
1908	1,001,645	616,497
1909	786,682	574,307
1910	982,361	732,345
1911	794,219	655,814
1912	719,013	750,187
1913	672,701	619,680

* From 40 to 50 per cent. of the total quantity of herrings exported to Germany is sent over the frontier to Russia.

2. *WHITE FISH FISHING.*

After the herring fishery, the next most important branch of the industry in Scotland is the white-fish fishing. This fishing is carried on by means of three classes of vessels and three methods of fishing—the vessels differentiated by their methods of propulsion (steam, motor, or sails and oars), and the methods of fishing, whether by trawls, anchored nets, or by lines. We will deal with the results of these methods (1) in the aggregate, and (2) separately.

The following are the totals of the white-fishing since 1900 :—

Year.	Quantity.	Value.
	Cwts.	£
1900	1,834,498	1,074,600
1901	2,024,867	1,166,919
1902	2,076,580	1,133,088
1903	2,168,973	1,145,887
1904	2,459,373	1,202,942
1905	2,481,085	1,296,727
1906	2,558,574	1,306,529
1907	2,696,943	1,334,797
1908	2,917,295	1,351,108
1909	2,830,728	1,305,811
1910	2,968,598	1,491,339
1911	3,391,316	1,540,539
1912	3,331,799	1,666,380
1913	3,296,257	1,824,741

The outstanding feature of this table is the steady increase, both in quantity and value, of the white fishery of Scotland.

Trawling has contributed to the foregoing result as follows :—

TRAWLING.

Year.	Catch.	
	Quantity.	Value.
	Cwts.	£
1900	1,073,164	699,587
1901	1,325,072	820,813
1902	1,465,073	812,229
1903	1,566,370	829,932
1904	1,705,633	841,757
1905	1,745,431	948,117
1906	1,870,517	957,008
1907	2,061,336	985,751
1908	2,092,411	971,972
1909	2,020,209	953,259
1910	2,102,031	1,102,976
1911	2,439,108	1,113,820
1912	2,392,692	1,232,193
1913	2,541,948	1,424,115

And all other methods as follows :—

Other Methods.

Year.	Catch.	Value.
	Cwts.	£
1900	757,000	371,000
1901	696,000	341,000
1902	608,700	318,300
1903	602,600	315,900
1904	753,700	361,200
1905	735,654	348,610
1906	688,057	349,521
1907	635,601	349,041
1908	824,684	379,079
1909	810,519	352,552
1910	866,567	388,363
1911	952,208	426,719
1912	939,107	434,187
1913	754,309	400,626

Persons Employed.

The number of persons employed in the fisheries of Scotland and the various industries subsidiary thereto in the year 1913 was 90,710. Of these, 38,262 manned the fishing fleet, 16,269 were gutters and packers of herrings, 14,560 were engaged in the carrying trade, and the remainder were engaged in other operations connected with the fishing industry.

Intelligence.

The Board's system of official telegraphic information between ports at which a herring fishing is in progress was begun in a tentative way in the year 1895, when 3800 telegrams were first issued. Last year the number of telegrams amounted to 6014.

The telegrams are despatched daily at noon by the Board's Fishery Officers from their own ports to every other port in Scotland at which a herring fishing is then going on, and in the event of additional information of value becoming known later in the day a second telegram is despatched. Upon receipt they are exhibited publicly at the fishmarkets and other public places, where they can readily be seen by all concerned.

The points on which the telegrams give information are (1) number of arrivals of herring boats, (2) average catch per boat, (3) quality of the fish, (4) range of prices, (5) position of chief fishing grounds, and

(6) nature of wind and weather. Duplicates of all these telegrams are at the same time sent to the Head Office in Edinburgh.

At the end of each week telegrams are sent by each District Officer to the Board giving the catch for the week, the quantity cured, the number of barrels branded under each brand, the quantity exported, and the countries to which exported. This information is tabulated, and a statement of the totals for the East Coast, Orkney and Shetland, and the West Coast respectively is sent for publication to the Press.

A statement is also issued at the end of each month showing the quantity of cured herrings of each description in stock in this country.

Information is also received from Germany, Holland, Norway, and Sweden giving particulars, in so far as those countries are concerned, of the catch, cure, and export of herrings and other sea-fish, and this is also issued to the Press for the information of those interested.

The publication of such information in the Press depends, however, upon the convenience and the exigencies of the time and space at the disposal of the various newspapers, many of which do not circulate extensively among those most directly interested. The Board therefore have had long in contemplation a publication of their own in order to make directly available all the information at their disposal to those engaged in the various branches of the fishing industry. Hitherto they have not been enabled to succeed in this object for the lack of funds.

Improvement of Fishery Harbours.

From time to time the Board have pressed the question of the growing need of increased harbour accommodation, owing to the change from sailing boats to steamers of the vessels engaged in the herring fishing. Harbours which were adequate to the circumstances existing at the time of their erection are becoming year by year less capable of meeting the growing demand both in docking space and depth of water. Fishermen are thus forced to lay up their fishing boats at sometimes considerable distances from their homes during the winter months. The necessary attention and repairs required can only be carried out at great expense in travelling and otherwise, to say nothing of enhanced dock charges. Several other inconveniences and economic dangers following upon the phenomenal rapidity of change from sailing power to steam have impressed upon the Board the absolute necessity of making the harbours reasonably adequate to meet that change. This is without doubt one of the most pressing problems in connection with the herring fishing industry.

In our last Report we stated the steps taken by us to bring the needs of Scotland in this respect before the proper authorities and the result at present stands as under :—

GRANTS AND LOANS TO SCOTTISH FISHERY HARBOURS.

Harbours.	By Development Commissioners.			By Fishery Board.	Total Free Grants.	Total Loans.	Total Amount being applied to Harbour Assistance.
	Free Grant.	Loan Free of Interest.	Loan bearing Interest.	Free Grant.			
	£	£	£	£	£	£	£
Berwick-on-Tweed	4,000	..	7,000	..	4,000	7,000	11,000
St. Andrews .	..	..	..	1,069	1,069	..	1,069
Stonehaven .	6,500	7,000	..	..	6,500	7,000	13,500
Fraserburgh .	20,000	..	20,000	..	20,000	20,000	40,000
Pennan . . .	..	..	..	321	321	..	321
Gardenstown .	4,000	..	4,000	..	4,000	4,000	8,000
Macduff . .	10,000	..	12,000	2,000	12,000	12,000	24,000
Banff . .	..	..	..	3,000	3,000	..	3,000
Whitehills . .	..	..	..	1,500	1,500	..	1,500
Cullen . .	2,300	..	2,300	..	2,300	2,300	4,600
Portknockie .	3,200	..	2,800	..	3,200	2,800	6,000
Findochty . .	1,500	..	1,500	500	2,000	1,500	3,500
Buckie . .	8,000	25,000	..	2,000	10,000	25,000	35,000
Lossiemouth .	600	..	10,000	..	600	10,000	10,600
Nairn. . .	7,000	..	..	..	7,000	..	7,000
Avoch . .	..	..	..	500	500	..	500
Cromarty . .	750	..	..	..	750	..	750
Wick . . .	..	15,000	..	..	..	15,000	15,000
Whitehall, Stronsay .	10,000	..	..	..	10,000	..	10,000
Lerwick . .	7,500	..	..	..	7,500	..	7,500
Ullapool . .	2,000	1,500	..	..	3,500*	3,000*	6,500*
Port Charlotte .	..	..	..	100	100	..	100
Maidens . .	..	..	..	1,500	1,500	..	1,500
Totals . .	87,350	48,500	59,600	12,480	101,340	109,600	210,940

* Including £1,500 grant and £1,500 loan from Board of Agriculture for Scotland.

A report by Mr. R. Gordon Nicol, M.Inst.C.E., the Board's Consulting Engineer, on the various harbours at which operations are in progress will be found under Appendix M.

MEANS OF CAPTURE.

I. Introductory Remarks.

Particulars of the vessels and men engaged in the Scottish fisheries are given in Appendices A. No. 1 and A No. 2 (pp. 4 to 57).

In Appendix A. No. 1 the vessels are tabulated according to the method of propulsion—sails or oars, motor, and steam, the last-mentioned class being sub-divided into trawl vessels and other steam vessels—and this Appendix includes not only vessels owned and registered in Scotland, but also vessels registered in England which

are engaged during the whole year—as in the case of most of the trawlers shown under the heading "Trawlers, other than Scottish"—or during the summer herring fishing—as in the case of the other steam vessels shown at page 12.

In Appendix A. No. 2 only Scottish vessels and boats are included, and these are tabulated according to classes (1st, 2nd, and 3rd), and shown under the various stations or creeks.

II. Men.

The number of fishermen engaged in the Scottish fisheries during 1913 was 38,262. That number included, however, 4,439 men on English vessels which fished in Scottish waters during the summer herring fishing only, and also 1,145 men from inland centres similarly engaged.

The resident fishermen and boys, including crofter fishermen, numbered 32,678, a decrease from 1912 of 457, of which 366 was applicable to West Coast districts. The only district which showed any substantial increase was Fraserburgh.

The most important event during the year which falls to be recorded under this head is the agitation and strike of the hired men before the commencement of the summer herring fishing. Starting with the Lewis fishermen the agitation spread to the East Coast ports, and for a time it seemed that the commencement of the fishing would be seriously delayed. Minor concessions were, however, made by the owners, and in the end little difficulty was experienced in completing crews, and, for the time being at least, the most important result was that only about half the usual number of men from Lewis was employed.

The remuneration of trawl hands was also the cause of discontent during the year at Leith and Aberdeen. At the former port a proportion of the men were on strike for several weeks, but the differences at Aberdeen were amicably settled after conferences between the parties.

III. Fishing Boats Propelled by Sails or Oars (except Sailing Trawlers).

A reference to Appendix A, No. 1 (pp. 4–7) will show that the decrease in sail boats shows no signs of abating. For the year a decrease of 569 was recorded, as compared with 445 in 1912, and an average annual decrease of 360 in the years 1909–12. Two districts—Barra and Lybster—showed increases of 7 and 2 respectively, but all other districts returned decreases. The decline was proportionately greater on the West Coast districts than on the East Coast, and in Orkney and Shetland, the respective percentages being 8·5, 7·8 and 5.

Dealing with the boats by classes (App. A, No. 2) it is found that the first class sail boats over 45 feet keel have decreased by 133, the first class between 30 and 45 feet keel by 81, the second class by 206, and the third class by 149, while the distribution of the different classes among the principal divisions of the coast is as follows :—

	East Coast.	Orkney and Shetland.	West Coast.
First Class—over 45 feet keel . .	1106	202	54
Do. do. 30–45 feet keel . .	204	7	119
Second Class . . .	908	47	1171
Third Class . . .	1115	610	1219
Totals . . .	3333	866	2563

The greater part of the decrease was due to boats being discarded as no longer fit for use, but a considerable proportion of the decline was caused by the adoption of motor power and, in the case of the largest class, the substitution of steam vessels. During the year motor power was installed in some 143 sailing boats already on the register —22 over 45 feet keel, 48 between 30 and 45 feet, 63 second class, and 10 third class.

The following table shows the changes in the fleet of sailing boats over 45 feet keel during the past 10 years :—

Year.	Number.	Value.
1904	2,612	£676,107
1905	2,540	656,570
1906	2,455	633,411
1907	2,279	573,578
1908	2,102	525,873
1909	1,960	480,547
1910	1,808	430,720
1911	1,632	359,689
1912	1,495	311,964
1913	1,362	275,589

This table may be contrasted with those on pages xiv and xvi showing the increase in the number of steam vessels and motor boats, and while the decrease shown above is more than counterbalanced by the increase of steam and motor boats—with their higher catching power—it is a matter for some regret that so many of these vessels have been allowed to become useless or have been sold, at prices little more than nominal, to other countries or for other purposes.

IV. Steam Fishing Vessels (except Trawlers).

From Appendix A, No. 1 (pp. 10–15) it will be observed that the total number of steam fishing vessels (other than trawlers) engaged in the Scottish fisheries during 1913 was 1,341, an increase of 109 over the number in 1912. The total includes, however, some 450 English vessels engaged in Scottish waters during the summer herring fishery only, and 6 other vessels registered in England, so that the purely Scottish fleet was 884, as against 824 in 1912, an increase of 60.

In continuation of the return given in previous reports the following table shows particulars of the Scottish steam fishing fleet during the past 10 years :—

Year.	Vessels.						Fishing Gear.		Men and Boys Employed.*	
	Number.	Percentage of Increase.	Tonnage.	Percentage of Increase.	Value.	Percentage of Increase.	Value.	Percentage of Increase.	Number.	Percentage of Increase.
					£		£			
1904	204	31	5,161	28	453,095	27	59,596	32	1,639	26
1905	209	2	5,177	..	452,080	..	64,327	8	1,747	7
1906	274	31	6,538	26	608,060	35	96,588	50	2,347	34
1907	508	85	11,828	81	1,245,268	105	182,426	89	3,993	70
1908	626	23	15,610	32	1,535,550	23	232,216	27	4,924	23
1909	665	6	16,864	8	1,635,602	6½	248,455	7	5,428	10
1910	725	9	18,757	11	1,762,686	8	272,982	10	5,748	6
1911	794	10	21,146	13	1,903,298	8	303,201	11	6,064	5
1912	824	4	22,470	6	1,953,140	2½	315,722	4	6,290	3
1913	884	7	24,708	10	2,051,980	5	343,362	9	6,536	4

* Including non-resident men.

The increase shown is twice as great as was recorded last year, and reports from several of the districts indicate that a considerable number have been added to the register since the various returns were compiled. About half the number added during the year were second-hand vessels.

Following on two successive good herring fishing seasons the closing months of 1913 witnessed a great demand for steam drifters. Building yards were fully booked up, and were unable to undertake all orders offered, while the prices of second-hand vessels rose accordingly. In some districts the fishermen continue to favour a smaller type of steamer than has recently been the case. The difference between the cost of such a steamer built of wood and that of a steel drifter of the largest type is considerable, while the cost of working is naturally lower also.

The majority of the East Coast districts share in the increase. Fraserburgh takes first place with an addition of 21, while Buckie is a good second with 19, and the number of steam drifters in the latter district now—for the first time—exceeds the number of sailing drifters.

As before, information has been obtained as to the earnings of the steam fishing fleet at the principal herring fishings, and the following table may be taken as giving a fairly accurate estimate of the average figures for the principal districts :—

District.	Average Earnings per Vessel.			
	Great Summer Herring Fishing.		English Herring Fishing.	
	1913.	1912.	1913.	1912.
	£	£	£	£
Anstruther . . .	962	830	790	740
Aberdeen . . .	700	740	715	660
Peterhead . . .	1,260	982	850	825
Fraserburgh . .	1,250	1,043	760	790
Banff . . .	1,280	960	720	750
Buckie . . .	1,200	950	800	800
Findhorn . . .	1,200	1,000	760	700
Wick . . .	1,350	1,020	670	720

The figures given represent the gross earnings, and the working expenses, varying from 30 to 40 per cent. in the Scottish fishing and from 25 to 30 per cent. in the English fishing, require to be borne in mind.

Except at Aberdeen, all the averages for the summer herring fishing show substantial increases. Wick actually returns the highest figure, but the steam drifter fleet there is small, and Banff may be regarded as taking first place with £1,280, Peterhead and Fraserburgh being close behind.

As regards the English autumn fishing, the returns show comparatively little increase on the figures for 1912, but it must be kept in view that the 1912 earnings were themselves exceptional and, consequently, that there was little room for improvement.

The figures given above require to be supplemented by the earnings from the other fishings engaged in. Many of the boats took part in the Irish herring fishing and the winter herring fishing on the West Coast, while others devoted attention to lining and cod net fishing. The Irish fishing was not particularly remunerative, but very good earnings were made on the West Coast.

Of the fleet of 884 vessels only about 20 are engaged regularly at line fishing, and during the year these were only moderately successful. They operated under the double handicap of stormy weather and frequent difficulty in obtaining herrings for bait. The gross financial returns of the Aberdeen vessels appear to have increased, but the increase was counterbalanced by higher working expenses. In addition to the regular Aberdeen line fleet 16 trawlers at that port were fitted out for line-fishing, but the results were only fair.

In the Report for 1912 reference was made to the fitting of a drifter with trawling apparatus at the close of the herring season. During the early part of last year two drifters registered at Banff engaged in trawling, and while the venture did not prove a financial success, the crews gained experience without much pecuniary loss, and after the close of last herring season they were again fitted with the trawling gear and proceeded to the south of England to engage in trawling there. No report as to the results of their operations is, however, available so far.

V. Beam and Otter Trawl Vessels.

The returns for 1913 again show a decrease in the number of British boats engaged in trawl fishing from Scottish ports (App. p. 16)

The Scottish fleet shows a decrease of 6, and now stands at 298. The Leith and Granton boats have decreased by 8, while Aberdeen and Peterhead show increases of 1 each. Notwithstanding this numerical decrease it is plain that the fleet is more powerful than it was a year ago, as the total tonnage shows an increase of 445. The older boats are being discarded, and larger, more powerful and more efficient vessels are being added, and those factors are more than sufficient to compensate for the small decrease in number.

The English trawlers engaged show an increase of 4 (App. p. 16), while the foreign trawlers, mostly German, which fish chiefly in the distant areas, such as Iceland waters and the White Sea, and land

their catches more or less regularly at Aberdeen, have increased from 25 to 30.

As showing the difference between the Granton and Aberdeen trawling fleets, it may be noted that the average tonnage of the former is 46 and of the latter 60.

VI. Motor Boats.

In the concluding remarks on motor fishing boats in the Report for 1912 it was predicted that the next few years would witness a great development in the application of motor power to the smaller classes of boats, and the returns for 1913 go to show that the forecast was well founded. The statistics as to motor boats will be found in Appendix A, No. 1, p. 8, but the returns there given may conveniently be supplemented by the following statement giving particulars of the motor fleet since 1901, when the first motor boat to take part in the Scottish fisheries appeared :—

Year.	First Class. Over 45 feet keel.	First Class. 30 to 45 feet keel.	Second Class. 18 to 30 feet keel.	Third Class. Under 18 feet keel.	Total.	Increase in each year.
1901	1	..	..	..	1	..
1902	2	..	..	..	2	1
1903	3	..	..	..	3	1
1904	3	..	..	..	3	..
1905	4	..	..	..	4	1
1906	5	..	..	..	5	1
1907	6	..	1	..	7	2
1908	10	1	7	..	18	11
1909	35	3	30	7	75	57
1910	56	1	90	9	156	81
1911	75	4	144	10	233	77
1912	81	15	244	16	356	123
1913	102	80	313	28	523	167

It will be observed that the total increase was 167, as against the increase of 123 recorded in 1912. The increase in the case of the largest and smallest classes was comparatively small, and the major portion was applicable to boats in the intermediate classes. This was largely due to the extension on the East Coast of the application of motor power to boats of from 20 to 45 feet keel, intended primarily for line fishing—but also suitable for herring fishing at places where the shoals do not lie too far from the coast.

In 1912 the West Coast, and particularly the Clyde districts, held the honours in this matter, but an examination of the figures for the year under review shows that the East Coast districts claim the greatest increase, the number on the East Coast having advanced from 120 to 240. The comparatively small increase in the Clyde districts—27 as against 67 in 1912—is, however, only evidence of the high position those districts hold, the majority of the best and most industrious fishermen there already possessing motor boats, and no great increase in the Clyde can be looked for.

Only two districts—Lybster and Cromarty—are now unrepresented

in the motor boat return, but a crew in the former district hired a motor boat for part of the year, and it may be hoped that this is the prelude to ownership.

On the East Coast the most noteworthy increases were recorded in Leith, Anstruther, Montrose, Banff, and Wick, the additions being 11, 17, 34, 10, and 20 respectively, or collectively 92 out of the total of 120.

Orkney shows an increase of 8, but Shetland has remained stationary, while Stornoway, Loch Carron and Skye and Fort William show increases which, though small in themselves, are promising.

Of the 167 boats in which motor engines were installed only about 32 were new boats built specially for the purpose; the remainder were sailing boats already on the register.

It has been remarked on previous occasions that the motor has not found much favour with Scottish fishermen for the large herring boats, and this continued to be the case during 1913. The fleet of motor boats over 45 feet in keel shows an increase of only 21, and this may be compared with the increase of 60 in steam drifters. Taking into consideration the difference in cost, those figures are significant, and their significance is increased by the fact that a number of Eyemouth fishermen, owners of motor drifters, were at the close of the year contemplating the purchase of steamers to take the place of their motor boats. Eyemouth has hitherto been the principal centre of the motor drifter, and the movement there towards steamers shows that for deep sea fishing motor power is regarded by fishermen as inferior to steam.

In the case of the smaller boats, however, steam is not a competitor, and fishermen all over the country are alive to the desirability of having motors installed in such boats.

Leith district has been slow in adopting modern methods, and it is therefore pleasant to note that motors were installed in 13 line yawls during the year, with encouraging results. In Anstruther district the small-line motor fleet has been trebled, and at St. Monans and Pittenweem motors were installed in several boats of from 30 to 45 feet keel, intended for the winter herring fishing and great line fishing—an experiment which will be watched with interest. It may also be mentioned that the motor has been the means of developing the small-line fishing at Pittenweem; it is now a regular industry giving continuous employment to several crews, in place of a seasonal occupation only.

As indicated above, Montrose district has taken a prominent place in the installation of motors in line boats, and from the success which has been attained by boats so fitted it is probable that further development will take place. Gourdon has taken the first place in the extension, and now possesses 21 motor skiffs, while the Johnshaven Company, mentioned in the Report for 1912, owns 4 motor skiffs.

In Banff district, the village of Whitehills trebled its fleet of motor boats with successful results, while in Wick district, 14 small motor craft were added, but the remaining Moray Firth districts show little activity in the extension of motor power for inshore fishing. The herring fishing commands their attention, and some medium-sized motor boats added in Findhorn district were intended for that fishing.

As the Appendices do not show the numbers of the different classes

in the various districts, the following table giving the figures for sections of the coast may be of interest :—

Districts.	First Class. Over 45 feet keel.	First Class. 30 to 45 feet keel.	Second Class. 18 to 30 feet keel.	Third Class. Under 18 feet keel.	Total.
Eyemouth to Fraserburgh	76	51	32	1	160
Moray Firth . . .	25	12	33	10	80
Orkney and Shetland .	..	4	18	17	39
West Coast (except Firth of Clyde) . .	1	10	29	..	40
Firth of Clyde . .	..	3	201	..	204
Totals . .	102	80	313	28	523

Engines Installed.

A larger variety of engines was installed during 1913 than for a year or two previously—the total of the different varieties being 14—but the engines which have proved most popular in past years still retained their place.

In 149 installations regarding which information has been received, the makes of engines installed comprised Kelvin, Gardner, Alpha, Grei, Brit, Gleniffer, Grampian, Avance, Nat, British Monarch, Parsons, Detroit, Bollinders, and Max. As in previous years the majority of the engines installed in the Orkney district were second-hand motor car engines, and one such engine was also installed in Greenock district.

The list given above is the more interesting by reason of the fact that it includes at least four makes which are suitable for crude oil—Nat, Avance, British Monarch, and Bollinders. It has for some years been hoped that the crude oil engine would be developed so that working expenses could be reduced, and the working of the engines mentioned will be watched with interest. It must be said, however, that the fishermen owning the boats in which the Nat and Avance engines were installed have not confined themselves wholly to crude oil, as it was found that paraffin gave better results.

For the majority of the other engines installed the fuel used is paraffin.

The horse-power of the engines installed during the year ranged from 4 to 90. As the horse-powers are not definitely standardised, it is impossible to give an accurate classification, but the following statement may be regarded as approximately correct :—

Horse-power.	No. of Engines.
Over 50	14
30–40	2
20–30	16
10–20	47
Up to 10	70
Total . . .	149

It is interesting to note that there is a movement in the Clyde districts towards higher powered engines, several 7 horse-power engines having been replaced by 13 or 26 horse-power engines, and also that a number of the Clyde boats and of the smaller boats in other districts are being fitted with reversing gear, which should add considerably to their manœuvring powers.

Of the whole motor fleet only 80 have engines exceeding 50 horse-power.

Enquiries have been made regarding the cost of the various engines, but it has been found that the prices vary considerably, and any tabulation of the figures would prove unsatisfactory and might be misleading. It may be said, however, that an engine developing about 7 horse-power can be obtained for between £65 and £90, while the cost of a good 13–15 horse-power engine ranges from £105 to £150, reversing gear being an extra in each case.

Capstans.

One of the great drawbacks to the adoption of motor power in the larger boats has hitherto been the capstan difficulty. In the "Pioneer" experiment (*vide* the Board's Report for 1909) a motor capstan was originally installed, but it proved unsatisfactory, and a steam capstan required to be substituted. The same power was adopted by the motor drifters generally, and although there are now several makes of motor capstans on the market the steam capstan has not yet been displaced.

For 1913, however, an advance falls to be recorded, a boat of about 40 feet keel in the Findhorn district having been fitted with a Torbinia motor capstan driven from the main engine—a Nat—and if the experiment proves successful, the example will doubtless be widely followed. From Eyemouth district also it is reported that some of the motor yawls have been fitted with hauling gear, somewhat similar to the "Iron Man," which can be worked either by the motor or by hand.

Advantages and Earnings of Motor Boats.

Some of the advantages which motor boats possess over sail boats are obvious. Greater mobility, ease of working, independence of winds and tides, and less dependence on weather are important considerations, and might of themselves, in certain circumstances, be sufficient to justify the adoption of motor power. The principal factor in the question is, however, the financial one, and unless the adoption of motor power is followed by an increase in earning power commensurate with the capital expenditure and the necessary outlay for working and allowance for depreciation the expenditure would not, in general, be justified. That such increased earning power does follow seems, however, to be plain, not only from the reports received by the Board but—what is perhaps more significant—from the increases in districts where actual experience of other boats is available.

In previous reports information has been given as to the earnings of the large motor drifters, and of the Clyde fleet, and it is not proposed to give details for such boats for the past year. It will be sufficient to say that the motor drifters occupied a similar position relative to steam and sailing drifters as in previous years, and that the Clyde motor

boats again demonstrated their great superiority over sail-boats, but it may be mentioned that one large motor boat in Wick district grossed about £2,500 for the year.

In addition to the general advantages to which reference has been made, motor boats engaged in line fishing possess the additional advantages over sailing boats similarly engaged, that they can haul their lines with little trouble owing to their ability to proceed under power direct from one end to the other, whereas the sail boat frequently has to adopt the laborious and tedious process of beating up against the wind or rowing, and that they can return to a known prolific ground against adverse winds and tides which preclude the sailing boat from doing so—circumstances to which their uniformly greater success is largely due.

In dealing with the earnings of the class of boats in which most interest is being manifested at present the difficulty of obtaining accurate information presents itself. Fishermen engaged in small line fishing do not as a rule keep a record of their earnings, and where accounts are kept reticence is displayed. The following statements, extracted from reports by the local officers after careful inquiry, may, however, be taken as substantially correct:—

Leith District.—In general the motor yawls obtained from 1 to 2 boxes of fish per shot more than the sail boats, representing an addition of 10s. to £1 per day.

Anstruther District.—The average value of the line catches of motor boats, per trip, was £2 17s., as compared with £1 3s. 5d. for sail boats, in addition to which the motor boats were able to make a greater number of trips.

Montrose District.—As a rule the catches of the motor skiffs at line fishing were double those of similar sail boats, while several motor skiffs, carrying crews of four men each, which took part in the North of England autumn herring fishing, grossed on an average about £126 in a period of five weeks.

Banff District.—Earnings of boats of 26 to 29 feet keel ranged from £6 to £8 per week for line fishing, and £8 to £12 for cod net and flounder net fishing, about double the earnings of the sail boats.

Wick District.—Owing to very unfavourable weather and scarcity of fish, the results were not very remunerative, but the boats had many advantages over sailing boats.

Orkney District.—The earnings were from 25 to 30 per cent. better than those of similar sail boats.

Shetland District.—One motor skiff of 31 feet keel, carrying a crew of four men, which worked during the whole year at various fishings, grossed over £1,000, the cost of oil being about £6 per month.

In some of the West Coast districts no definite information as to earnings is available, or no proper comparison can be made with the results obtained by sailing boats. Three East Coast districts report unsatisfactory results, but only 7 boats were involved, and 5 of those were engaged in the speculative West Coast herring fishery.

Along with the earnings of the motor boats, the working expenses

require to be taken into consideration, and these, owing to the increases in the price of oil in recent years, are substantially greater than in the earlier years of the movement. Paraffin, of which most is used, now costs 7½d. or 8d. per gallon, as against 4½d. or 5d. a few years ago. Crude oil costs about 4½d. per gallon, but as indicated above very few of the engines installed use such oil.

As to the actual cost of working, the Montrose officer reports that the cost of oil for the skiffs in that district varies from £1 7s. to £1 11s. for a full week's working; in Stonehaven district the cost for a 15–20 horse-power engine was £1 10s. per week; and the Shetland officer is informed that for 7–10 horse-power engines the cost is about £3 per month, and for 15–16 horse power engines about £4 5s. per month.

To the running expenses an allowance for depreciation falls, of course, to be added, but having regard to the information as to earnings which are given above it appears that, as a general rule, motor boats of a moderate size are remunerative investments.

Conclusion.

As regards the largest class of fishing vessels the position remains the same as when the Report for 1912 was written; motor-power is, in the opinion of Scottish fishermen, inferior to steam for such boats, and there is little prospect of much extension in the near future of the adoption of motor power for this class.

In the intermediate classes—boats of from 18 to 45 feet keel—the position is different however. All reports indicate that fishermen are alive to the benefits to be derived from the installation of motor engines in such boats, and it seems probable that a further increase will fall to be recorded at the end of the present year.

FISH LANDED.

I. Total Catch.

As stated in the introduction to this Report, the total quantity of fish landed in Scotland in 1913 (exclusive of shell-fish) was 7,828,350 cwts., valued at £3,925,360, a decrease in quantity of 758,756 cwts., but an increase in value of £336,776, as compared with the total for 1912, which in its turn was £528,000 in advance of 1911. Of the decrease in quantity 95 per cent. was referable to pelagic fish, but the increase in value was almost equally divided between pelagic and demersal fish. Towards the gross catch herrings and other pelagic fish contributed 58 per cent., trawled fish 32 per cent., and demersal fish taken by line and net 10 per cent., as compared with 61, 28, and 11 per cent. respectively in 1912, while as regards value the corresponding percentages were 54, 36, and 10, as against 54, 34, and 12 in the preceding year. The average price per cwt. realised was 10s. as compared with 8s. 4d. in 1912, and 7s. 2d. in 1911. The shell-fish landed realised £72,357, or £4763 more than in 1912, so that the gross total value of all kinds of fish was only £2283 short of four million pounds—by far the highest total ever recorded, being over 9 per cent.

in excess of the record set up in the preceding year, and 42 per cent. greater than the average for the period 1902–11.

II. Pelagic Fish taken by Nets.

(*a*) *HERRINGS.*

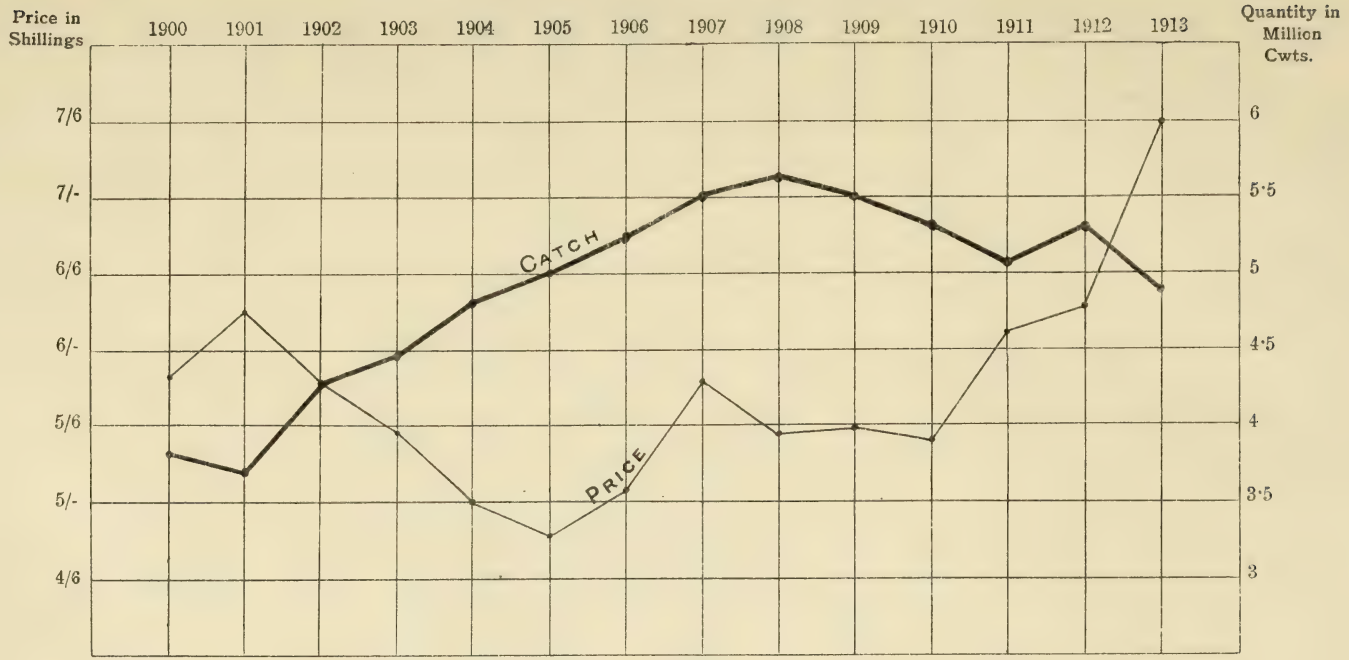
The year 1913 was characterised by a comparatively small catch of herrings—the lowest, in point of fact, since 1903—and by the record prices received for them. The gross landings amounted to 4,449,323 cwts., or 751,977 cwts. less than in 1912, while the value was £2,087,754, or £177,221 more than in the preceding year. The decline in the landings was entirely referable to the summer fishing, as the winter catch was nearly three times as great as that of 1912. The value, which for the first time in the annals of the industry exceeded £2,000,000, marks another big step in advance, as it was 9 per cent. greater than the figures for 1912, and 47 per cent. more than the average for the ten years 1902–11. Prior to 1912 the highest sum ever recorded was in 1907, when it reached £1,795,650, and to appreciate the figures for 1913 at their proper value it must be borne in mind that the landings in the earlier year were greater by over 1,800,000 cwts.

The abnormal prices realised for herrings during the year under review were attributable to much the same combination of circumstances as in 1912. The early fish again proved suitable for curing, and if anything were of better quality than in 1912; the weather, both in Scotland and on the Continent, was again cool and favourable for transport; the Continental markets, as was the case in the preceding year, were comparatively clear when the early fishing opened, for although the heavy winter fishing at first threatened to prejudice the market for early herrings, the demand proved unexpectedly good, and the cure was rapidly disposed of; while the upward tendency in the prices of other food stuffs continued. But more potent than any of these factors was the failure of the early fishing at the ports north of Peterhead. Here curers, in anticipation of a successful fishing, had laid in vast stocks of curing material, and when, after a comparatively brisk start, the supplies of fresh herrings gradually dwindled until they were hopelessly inadequate to the preparations which had been made, the competition among curers for the meagre quantities landed—intensified as it was by the addition of the smaller curers owing to the fact that early fish were now eligible for the brand—reached a degree of keenness which, at the period of greatest scarcity, drove the average price up to between £2 10s. and £3 per cran.

The effect of this competition is strongly reflected in the average price per cwt. realised, which for the year under review works out at 9s. 4½d., as against 7s. 4d. in 1912, which, be it remembered, was the previous highest; and in view of the rapid advance thus indicated, a diagram is given tracing the variation in the catch and price of herrings since 1900. The figures have been smoothed by averaging each year with the two years immediately preceding it.

It will be seen that from 1900 to 1905 there was a regular relation-

DIAGRAM SHOWING THE RISE AND FALL IN THE CATCH AND PRICE OF HERRINGS IN SCOTLAND FROM 1900 TO 1913 INCLUSIVE.



ship between the quantity landed and the price—an increase in quantity being accompanied by a fall in price, and *vice versa.*

In the next two years, however, the price rose concurrently with the supply, and although since 1908 a fairly regular fall is seen in the catch, the price did not respond to this movement until 1910, since when it has risen sharply to its culminating point in 1913.

The average prices obtained by steam, motor, and sailing vessels over the whole year were respectively 9s. 4d., 8s. 10d., and 9s. 8d. per cwt. At first glance these figures are at variance with the usual order of things—that steamers as a whole obtain better prices than sailing boats—but a closer examination of the tables reveals the fact that this is due to the disturbing influence of the heavy winter catch, the great bulk of which was landed by steamers, and for which little more than half the price paid for summer fish was received. If the comparison be confined to the summer fishings, steamers again take first place, the averages being respectively 10s. 3d., 9s., and 9s. 10d. per cwt. The relatively low price obtained by motor boats is explained by the fact that the bulk of their catch was taken in the Clyde, and was therefore outwith the influences which forced up prices on the East Coast.

The incidence of fishing operations during the year under review showed a marked divergence from that of the two preceding years. The winter fishing, from the low ebb to which it had fallen in the preceding year, jumped suddenly to the opposite extreme, and yielded the highest total in its history. The summer fishing, which in 1912 and 1911 gave excellent results during June and July, and fell away in August, gave precisely opposite results in 1913, while the financial success of the early fishing in 1912 had been such that no close time was observed or even mooted during the year under review.

Of the total landings, the East Coast contributed 53 per cent., Orkney and Shetland 23 per cent., and the West Coast 24 per cent., as compared with 49, 37, and 14 per cent. in 1912, the displacement thus portrayed clearly illustrating the effect of the changed conditions outlined above, while in respect of value the corresponding percentages were 55, 25, and 20, as against 47, 39, and 14 in the preceding year. An examination of the district returns shows that Peterhead, with a catch of 774,892 cwts., has ousted Shetland from the place which it has so long occupied as the leading herring fishing station. This district, however, retained the second place, followed by Fraserburgh, Stornoway, Wick, and Orkney, in the order named, Stornoway having risen from the sixth to the fourth place, and these districts collectively accounted for 77 per cent. of the entire catch.

As contributors to the herring catch sail boats fell further behind during the year as compared with power-driven vessels, and this notwithstanding that when the fishing revived during August, the conditions, both as regards the weather and the proximity of the shoals to the land, were in every respect suited to them, so that they were enabled to compete on level terms with the steam and motor drifters at a time when the best catches were being landed. The changed conditions in the herring fishing industry are well brought out by a comparison of the proportions of the catches landed by each type of vessel in 1906 and 1913 respectively. In the earlier year (chosen as being the first in which separate records were kept) sailing

boats landed 69 per cent., and steamers 31 per cent. Of motor boats only 5 were then in existence. In 1913, sailing boats landed 28 per cent., motor boats 8 per cent., and steamers 64 per cent.

The quantity of trawled herrings landed was 12,106 cwts., which realised £6628, as against 5714 cwts. and £2698 in 1912. This quantity is insignificant in itself, but it forms no index of the extent to which trawling for herrings is actually carried on, as this method of fishing is prosecuted chiefly from English trawling ports. During the last two years trawling for herrings has been the subject of considerable agitation by drift-net fishermen, who allege that this method of fishing destroys large quantities of immature fish, and so threatens the future of their own industry ; and in view of the importance of the question and the magnitude of the interests involved, an Inter-Departmental Committee was appointed to inquire into the whole question of its effect upon the fisheries. This Committee drew up a scheme of investigation, in the carrying out of which the Board were asked to co-operate, and the inquiries undertaken (a description of which will be found under Part III. of this Report), resulted in a great mass of records being obtained, which are now being tabulated and considered.

From the fishermen's point of view, the Scottish season of 1913 was altogether successful. Curers, however, found it a very trying one, notwithstanding the buoyant tone of the Continental markets ; while the earnings of shore workers were curtailed owing to the shortage in the catch. But no review of the year's herring fishing would be complete which left out of account the operations of Scottish fishermen at the English autumn fishing, and there, with a catch which was the greatest on record, the season was an unqualified success for all concerned. Curers amply retrieved any losses incurred during the Scottish fishing ; shore workers had almost more work than they could overtake ; while fishermen, with their record earnings there added to record earnings in Scotland, could at the close of the season look back upon the most lucrative year in their experience.

Winter Herring Fishing.

The winter herring fishing of 1913 was the heaviest ever landed, the total catch amounting to 626,197 cwts., valued at £174,740, as against 247,313 cwts. and £64,195 in 1912. The districts responsible for the increase are Stornoway (chiefly), Wick, and Fort-William, as the catch in the Firth of Forth shows a decline of about 25,000 cwts., or 37 per cent., from that of the preceding year. About three-fifths of the total are referable to Stornoway, where the season was remarkably successful, the catch exceeding the previous highest—landed in 1907—by 147,000 cwts., or 67 per cent. Extensive shoals were located in the Minch and along the North Coast, and their density is evidenced by the fact that the Stornoway catch was landed by a fleet which at no time exceeded 140 steamers, whereas the catch of 1907 represented the landings of a fleet of nearly 300 drifters ; and that the bulk of the 47,000 cwts. landed at Wick was secured by a fleet of from 12 to 18 steam vessels.

The fish were of good quality for winter herrings, and the average price per cwt. realised—5s. 7d.—was 5d. more than in the preceding year.

Early Summer Herring Fishing.

The quantity landed during the currency of this fishing, which is regarded as covering the period from April to June, was 1,445,469 cwts.—a falling off from the preceding year's total of 656,653 cwts. This deficiency was due to the falling off of the fishing in northern waters, but particularly in the districts of Shetland, Orkney, and Wick. The failure was ascribed by the fishermen variously to the calm, clear weather which prevailed, and to the presence of an extensive shoal of mackerel on the usual fishing grounds—whether correctly or not it is difficult to say, although their theories are supported by the fact that when the mackerel disappeared and breezier weather set in the fishing immediately improved. Whatever its cause, the failure, following as it did upon the heavy fishings of the two preceding years, affords yet another illustration of the capricious nature of the herring, and provides an instructive commentary on the demand for a close time which was put forward after the bitter experience of 1911, when the market was glutted with immature fish for which the fishermen could not find a market. Certainly the contentions of those who believe that, in so far as herring fishing is concerned, the question of a close time may safely be left to nature, were not weakened by the course of events in 1913.

Of the total catch, 43 per cent. was landed on the East Coast, 42 per cent in Orkney and Shetland, and 15 per cent. on the West Coast, as compared with 43 per cent, 48 per cent, and 9 per cent. respectively in the previous year, the West Coast having thus recovered some of the ground lost in recent years. The principal contributor on the East Coast was Peterhead, whose catch of 247,538 cwts.was only 13,612 cwts. less than in 1912 ; and on the West Coast, Barra, whose catch of 88,554 cwts. represents an increase of over 100 per cent. upon the preceding year's total.

The value of the catch was £610,304, as compared with £628,817 in 1912, the average price per cwt. working out at 8s. 5d. and 6s. respectively.

Great Summer Herring Fishing.

The great summer herring fishing is regarded as covering the period from 1st July to the close of the year, and the quantity landed during that period amounted to 2,377,657 cwts., as compared with 2,851,865 cwts. in 1912. The East Coast, with a total of 1,654,000 cwts. as against 1,556,000 cwts., is the only section of the coast to show an increase, and this increase was referable to the districts from Peterhead southwards, those from Fraserburgh to Wick having been involved in the deficiency on the northern grounds. The major part of the decline is referable to Orkney and Shetland, whose catch was considerably less than half that of the preceding year, the figures being respectively 404,710 cwts. and 925,359 cwts. The West Coast contributed 318,930 cwts., or about 51,000 cwts. less than in 1912, a falling off which was due mainly to the diminished yield of the loch fishing in the later months of the year.

While, however, the decrease in the early herring catch was due directly to scarcity of herrings, it was ascribable, in the case of the fishing under discussion, less to that cause than to the fact that, disheartened by their lack of success, the East Coast and English

drifters had practically all left the northern ports by the middle of July; and it was to the augmentation of its fleet by a considerable number of these vessels that Peterhead's pre-eminence on the East Coast was due. As a matter of fact, as August advanced the fishing rapidly improved in northern waters, but although a few Scottish and English drifters returned, and worked very successfully, their numbers were far too few to make up the earlier shortage.

A feature of this August fishing was the large number of heavy individual catches landed, and one of 364 crans (about 64 tons) which realised £826, and to which particular reference is made in the annual report for Fraserburgh district (p. 200), is, both as regards quantity and value, probably without parallel in the history of herring fishing.

The value of the catch was £1,302,710, which gives an average price per cwt. of 11s., as compared with £1,217,521, and 8s. 6d. in 1912. On the East Coast the average was 10s. 11d., in Orkney and Shetland 11s. 9d., and on the West Coast 10s. 3d., as compared with 7s. 11d., 9s. 5s., and 8s. 11d. respectively in the preceding year.

In the following table the quantity of herrings landed in each district monthly in 1913 is shown, together with the totals for 1912. This table illustrates clearly the sharply defined differences between the two years.

RETURN showing the Quantity of Herrings landed in each District in each Month of the Year 1913.

District.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	TOTAL.
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
Eyemouth .	185	84	749	..	6,552	35,999	44,097	17,209	9,397	..	..	..	114,272
Leith . .	7,772	2,205	499	31	212	38	151	186	155	126	117	1,034	12,526
Anstruther .	3,589	16,783	10,871	420	7	5,753	13,666	6,009	1,320	..	7	63	58,488
Montrose. .	1	..	10	66	70	1,640	6,673	4,377	..	..	..	..	12,837
Stonehaven .	..	..	..	7	182	637	371	133	..	..	..	..	1,330
Aberdeen .	34	583	376	341	2,902	51,545	106,400	96,593	6,979	3,060	230	124	269,167
Peterhead .	..	1,155	1,428	..	37,807	209,731	262,279	245,213	17,279	..	..	..	774,892
Fraserburgh	367	..	186	..	24,906	154,564	178,913	271,999	19,498	..	..	..	650,433
Banff . .	11	77	217	..	2,290	5,558	4,132	6,815	1,158	..	..	..	20,258
Buckie . .	767	106	236	..	574	5,894	5,628	6,097	1,478	..	..	..	20,780
Findhorn .	758	7	105	..	210	3,002	1,732	3,468	1,253	934	715	91	12,275
Cromarty .	..	..	..	..	..	..	30	..	..	129	35	..	194
Helmsdale .	..	..	..	..	..	175	28	91	7	..	..	..	301
Lybster . .	..	..	..	..	..	333	626	927	85	..	..	..	1,971
Wick . . .	29,157	13,715	4,085	4	11,461	63,978	110,006	179,999	14,742	112	5	34	427,298
Orkney . .	431	..	..	..	8,372	75,943	116,784	111,247	5,617	..	..	..	318,394
Shetland .	11	16,897	7,430	2,464	221,434	290,001	43,867	89,721	37,243	231	..	..	709,299
Stornoway .	138,123	171,116	57,285	141	27,422	29,251	31,719	15,170	11,909	7,067	13,646	21,401	524,250
Barra. . .	812	2,989	1,017	959	32,232	55,363	19,439	4,683	428	91	784	560	119,357
Loch Broom	717	1,009	..	..	38	222	583	1,264	6,981	3,810	..	2,065	16,689
Loch Carron and Skye .	10,814	2,394	224	..	144	2,637	5,531	2,728	5,158	680	4,495	5,302	40,107
Fort-William	39,502	25,741	4,486	52	15,763	10,664	3,417	5,070	2,888	1,240	3,906	7,078	119,807
Campbeltown	1,648	3,815	7,771	17,735	8,967	8,992	8,376	14,898	30,368	14,971	4,350	1,987	123,878
Inveraray .	..	..	..	91	266	763	3,458	4,172	1,267	112	490	77	10,696
Rothesay .	397	282	758	374	91	3,053	3,318	2,303	1,083	214	70	196	12,139
Greenock .	343	35	560	1,547	224	375	143	599	11,721	7,157	557	1,170	24,431
Ballantrae .	2,932	30,452	88	304	726	1,970	955	2,327	1,963	195	245	11,095	53,252
TOTALS 1913	238,371	289,445	98,381	24,536	402,852	1,018,081	972,322	1,093,298	189,977	40,129	29,652	52,277	4,449,321
TOTALS 1912	65,576	109,814	71,923	11,062	671,341	1,421,143	1,682,495	881,548	114,506	58,358	27,960	85,520	5,201,246

(*b*) *SPRATS, SPARLINGS, AND MACKEREL.*

Although the catch shows a slight improvement upon last year's figures, the sprat fishing can again only be described as a failure, the

total quantity landed being 8117 cwts., as compared with 5597 cwts. in 1912, while, owing to the poorer quality, they realised only £1772, as against £1866 in the preceding year.

The sparling or smelt is a rare fish in Scottish waters, and only 305 cwts., valued at £903, were landed during the year, as against 400 cwts., valued at £1063, in 1912.

There was a large increase in the quantity of mackerel landed, the figures for 1913 and 1912 being respectively 74,348 cwts. and 48,010 cwts., but the value did not keep pace with the catch, the total of £10,190 being only £1448 in advance of last year's figures. The whole of the increase is referable to the East Coast, where large quantities were taken by the herring fishing fleets working from the Aberdeenshire ports. The increase could have been much larger had a better market existed for this fish, as it was plentiful on both the East and West Coasts, but as matters stood fishermen in many cases did not trouble to take their catches to land, but returned them instead to the sea.

III. Demersal Fish, taken by Trawl, Lines, and Nets.

The total quantity of demersal fish landed in Scotland was 3,296,257 cwts., which realised £1,824,741. As regards quantity, this total falls short of that of 1912 by 35,542 cwts. or 1 per cent., but exceeds the average of the preceding five years by 208,310 cwts., or 6·7 per cent., while in point of value it again constitutes a record, exceeding the record made in the previous year by £158,361, or 9·5 per cent. and the average of the five preceding years by £353,706, or 24 per cent. The continuous and rapid rise in the price of white fish thus indicated has in recent years been perhaps the most prominent feature of the fishing industry.

Of the total catch trawlers landed 2,541,948 cwts., or 77 per cent., liners, 660,839 cwts., or 20 per cent. ; and net-fishermen, 93,470 cwts., or 3 per cent. The corresponding percentages in 1912 were 72, 25, and 3 respectively, from which it is evident that the responsibility for the decrease rests upon the line and net-fishings. The actual increase in the trawl catch amounted to 149,256 cwts., but of this quantity, however, 97,156 cwts. were referable to foreign trawlers, who last year landed over 22 per cent. of the total quantity of white fish landed at Aberdeen, and upon whom the numerous firms of fish-curers in that city are coming more and more to rely for the supplies necessary to the carrying on of their industry.

Of the value, £1,424,115, or 78 per cent., are referable to trawl fish ; £356,990, or 19·6 per cent., to lines ; and £43,636, or 2·4 per cent., to nets. In 1912 the corresponding percentages were 73·9, 23·7, and 2·4.

In the following table the fishing grounds or areas from which the Scottish white fish supply is drawn are shown, together with the quantity of the various species taken from each.

[Table.

TABLE showing the Quantity of each kind of Demersal Fish landed in Scotland in 1913, and the Fishing Area from which taken.

Kind of Fish.	North Sea.	Iceland and Faroe.	Western Grounds.	Irish Grounds.	Mixed Grounds.	Norway.	White Sea.	Totals.
	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.
Cod and Codling	604,832	488,366	106,324	136	23,306	2,028	8,457	1,233,449
Ling . .	109,333	10,208	87,177	3,510	5,985	189	2	216,404
Tusk . .	6,364	2,223	8,294	97	386	1	..	17,365
Saithe . .	251,358	99,101	51,848	..	6,909	1,764	5	410,985
Hake . .	15,116	17	2,833	34	909	..	5	18,914
Haddocks .	542,443	101,393	57,257	1	12,733	1,770	14,507	730,104
Whitings .	213,169	2,038	6,198	..	2,145	195	..	223,745
Turbot . .	3,475	2	269	2	42	1	..	3,791
Halibut . .	18,500	8,989	17,232	1,999	2,133	41	51	48,945
Brill . .	144	..	52	..	12	..	..	208
Lemon Soles .	31,053	4,084	900	..	656	3	..	36,696
Plaice . .	33,694	2,393	8,490	..	968	22	593	46,160
Dabs . .	9,595	130	137	..	45	..	..	9,907
Whitches .	27,811	1,731	440	..	274	11	2	30,269
Megrims .	16,939	502	774	..	409	12	35	18,671
Conger Eels .	1,802	2	19,988	44	107	..	..	21,943
Skate . .	80,499	3,777	44,101	1,782	5.305	33	1	135,498
Gurnards .	5,340	9	1,192	..	221	..	..	6,762
Catfish . .	20,188	8,372	317	..	639	5	223	29,744
Monks . .	22,837	702	821	..	473	15	..	24,848
Squids . .	22	6	..	..	..	..	..	28
Other Kinds .	13,249	8,914	8,979	5	442	29	203	31,821
Grand Totals .	2,027,763	742,959	423,623	7,610	64,099	6,119	24,084	3,296,257
Percentage .	61·52	22·54	12·85	·23	1·94	·19	·73	..

It will be observed that considerably more than half of the total supply is drawn from the North Sea, and that nearly the whole of the remainder is taken on the Icelandic, Faroese, and western grounds. The North Sea also furnishes the greatest quantity of each individual species except conger eels and tusk, this preponderance being most marked in haddocks, whitings, whitches, and megrims, and least so in cod and ling.

(*a*) *ROUND FISH*

The total quantity of round fish caught in 1913 was 2,934,263 cwts., valued at £1,444,299, these figures representing a decrease of 1·4 per cent. in quantity, but an increase of 10·7 per cent. in value, as compared with the returns for 1912. The value, as did that of 1912, constitutes an easy record for this class of fish. The falling off in quantity was almost entirely due to line-caught fish, the quantity so taken having fallen from 680,584 cwts. to 533,221 cwts., whereas the trawl catch advanced from 2,197,014 cwts. to 2,316,437 cwts. The quantity taken by net was 84,605 cwts., as against 97,299 cwts. in the preceding year. The increase in value was also wholly referable to trawl fish, although, owing to the enhanced prices ruling, the decline in value of line and net caught fish was not so pronounced as in quantity.

The species which show decreases are, in order of magnitude, haddocks, conger eels, cod, gurnards, hake, and catfish, while increases are shown, in the same order, by saithe, whitings, ling, monks, and tusk.

Haddocks.

The quantity of haddocks landed shows the serious falling off from the preceding year's catch of 23 per cent., the figures for 1913 and 1912 being respectively 730,104 cwts. and 953,226 cwts., while if

the comparison be made with the average for the preceding five years the decline amounts to 29 per cent. Notwithstanding the large decrease, however, the value declined by only 5 per cent., the respective figures being £549,711 and £575,957. It is difficult to assign any authentic reason for this decline, but the probability is that it is due to one of those fluctuations which are inseparable from the sea fisheries, and not to the impoverishment of the stock. This view is based on the fact that similar periods of depression have occurred before, as, for example, between 1895 and 1903. In the former year the catch was over 1,000,000 cwts., yet only three years later it had sunk to less than three-quarters of a million cwts., and it was not until 1903 that it again exceeded the million cwt. mark.

The trawlers' share amounted to 645,163 cwts., or 165,813 cwts. less than in 1912, of which 66 per cent. was landed at Aberdeen, where, it is interesting to note, the proportion of small haddocks in the aggregate landings fell from 47 to 42 per cent. Line fishing for haddocks is almost exclusively an inshore fishing, prosecuted by small sailing and motor boats, and the contribution from this source amounted to only 84,940 cwts., valued at £62,135, as against 142,250 cwts., valued at £83,384 in 1912, the greatest falling off having occurred in the Moray Firth and in Shetland and Montrose districts.

The average price per cwt. realised was 15s. 1d., as compared with 12s. 1d. in 1912, and 9s. 11d. in 1911.

Cod.

The catch of cod during 1913 was almost identical with that of 1912, but the value shows a decided increase. In all 1,233,449 cwts., valued at £583,451, were landed, these figures representing a decrease of 1594 cwts. in quantity, but an increase of £77,239 in value as compared with the totals for 1912. The proportion of the total catch taken by means of nets showed little alteration, but the line catch fell further behind, the quantity taken by trawl showing a corresponding advance. The percentages of the total attributable to the three methods were, by trawl, 77 per cent., by lines, 17 per cent., and by nets, 6 per cent., as against 70, 23, and 7 per cent. respectively in the preceding year. The average price per cwt. throughout the year works out at 9s. 5½d., as compared with 8s. 2d. in 1912, and 7s. 6d. in 1911.

About 40 per cent. of the total catch was taken on the Icelandic and Faroese grounds—principally the former—and of this quantity three-quarters were landed by foreign fishing vessels which specialise in this fishing.

Ling.

Of this species 216,404 cwts., valued at £79,554, were landed, these figures representing a considerable improvement upon the catch in 1912, which amounted to 190,964 cwts., valued at £59,764. The improvement was due mainly to the trawlers, who, with a catch of 93,353 cwts., valued at £29,898, as compared with 71,938 cwts. and £19,025 in 1912, still further reduced the lead which the liners still hold as regards this species. The steam line catch also shows the considerable increase of 10,751 cwts., or 12 per cent., which was due to the success of the vessels which operated off Rockall and Faroe, but the total line catch was only 4000 cwts. more than in 1912, owing to the diminished catch of the sailing liners, whose contribution fell

from 27,115 cwts. to 19,298 cwts. The percentages of the total catch referable to trawlers, steam liners, and sailing liners were respectively 43, 48, and 9, as compared with 38, 48, and 14 in the preceding year.

Whitings.

Whitings appear to have been very abundant in 1913, as the catch of 223,745 cwts. was nearly 29 per cent. in advance of that of 1912, and 50 per cent. greater than the average for the preceding 5 years. The increase was wholly referable to the trawl catch, which amounted to 210,364 cwts., as against 154,782 cwts. in 1912, whereas the catch by lines fell from 19,206 cwts. to 13,251 cwts. The value of the catch was £105,179, as compared with £70,151 in 1912.

Saithe, Torsk, and Conger Eels.

Saithe also were unusually plentiful in 1913, the total catch of 410,985 cwts. being over 43 per cent. in excess of the preceding year's figures, and 100 per cent. greater than the average for preceding 5 years. This increase was almost wholly referable to trawling, and was to a large extent due to the greater productivity of the Fladden ground, which was much resorted to during the summer. The catch by line, which amounted to 65,013 cwts., shows a slight falling off, which was more than counterbalanced by an increase of 3000 cwts., or 34 per cent., in the quantity taken by nets. The value of the catch was £78,491, as against £48,936 in 1912.

The quantity of torsk landed amounted to 17,365 cwts., valued at £6364, as compared with 16,503 cwts. and £5112 in 1912. This fish is landed principally by steam liners, who during the year under review accounted for 72 per cent. of the total.

Of conger eels 21,943 cwts., valued at £9960, were landed, as compared with 36,863 cwts. and £11,554 in the preceding year. This species is taken chiefly on the West Coast by steam liners, Mallaig being the principal port of landing, and the diminished catch was due mainly to the fact that the landings by those vessels at that port amounted to only 8582 cwts., as compared with 19,739 cwts. in 1912.

Hake, Gurnards, Catfish, and Monks.

The quantity of hake landed was 18,914 cwts. (of which 17,499 cwts. were landed by trawlers), valued at £15,869, as compared with 20,176 cwts. and £12,152 in the preceding year. These figures indicate a rise in the average price per cwt. of from 12s. to 16s. 9d., from which it may be inferred that hake were in greatly increased demand during 1913.

Gurnards, catfish, and monks are the least valuable of the round fish, and the aggregate catch of the three species, which was 61,354 cwts., realised only £15,720, the corresponding figures for 1912 being 61,248 cwts. and £14,652. The slight increase in value was due to the improved demand for catfish.

(*b*) *FLAT FISH.*

The total quantity of flat fish landed was 202,886 cwts., valued at £340,845. As regards quantity, the catch was almost identical with that of 1912, the difference, in favour of 1913, being only 844 cwts., but the value represents an increase of £18,232, and is the highest

ever recorded for this class of fish, exceeding the previous best—registered in 1911—by £16,809, or slightly over 5 per cent. Although there was so little difference in quantity, the proportions attributable to trawling and net and line fishing respectively differ considerably, the trawl catch having increased from 136,743 cwts. to 143,544 cwts., while the catch by line and net fell from 65,299 cwts. to 59,342 cwts. A more detailed examination of the returns further shows that the quantity would have shown a considerable deficit but for a greatly improved catch of whitches, as, with the single exception of megrims, which show a slight increase, every other species shows a decline.

Halibut.

The largest contributor to the flat-fish supply was halibut, which, with a total of 48,945 cwts., valued at £111,549, as compared with 49,696 cwts. and £107,795 in 1912, deprived plaice of the leading position. There was thus a falling off in quantity of 751 cwts., which, from the fishermen's point of view, was more than compensated for by an increase in value of £3754. Steam liners, by whom the bulk of the halibut is taken, found this fish appreciably scarcer in most of the areas frequented, and their contribution fell from 36,453 cwts. to 31,784 cwts., but the falling off in the catch of these vessels was largely counterbalanced by the greater success met with by trawlers, who landed 14,809 cwts., or 4363 cwts. more than in 1912.

Plaice.

As indicated above, plaice, in point of quantity, has for the first time lost its position at the head of the flat fish returns. The catch amounted to 46,160 cwts., valued at £71,601, as against 50,238 cwts. and £69,697 in 1912; here also a decrease in quantity having been accompanied by an increase in value. About three-fourths of the quantity and value were attributable to trawled fish, the actual figures being 30,804 cwts. and £55,033, or 4842 cwts. and £1147 less than in 1912. The catch by line, which amounted to 10,378 cwts., also fell off to the extent of 783 cwts., although the value, which was £10,501, was greater by £771. On the other hand, net-fishing for plaice was prosecuted much more successfully than in 1912, the quantity so taken being 4978 cwts., valued at £6067, as against 3431 cwts., and £3787 in the former year.

It is interesting to note that the proportion of small plaice in the total catch landed at Aberdeen was smaller than for several years past. For 1913 it was 22·7 per cent., as against 24·6 per cent. in 1912, and 25·5 in 1911.

Lemon Soles.

This species is taken almost exclusively by trawlers, and during the year under review these vessels landed all but 574 cwts. of the total catch of 36,696 cwts., which fell short of the preceding year's return by 4122 cwts. The decline did not, however, extend to the value, which indeed shows a slight increase, the figures for 1913 and 1912 being respectively £83,472 and £83,413.

Flounders.

The quantity of flounders landed in 1913 was 8239 cwts., valued at £5525, as compared with 9729 cwts. and £5742 in 1912, this species

being, after dabs, the least valuable of flat fish. It flourishes best in the brackish waters of estuaries, and is in consequence taken principally by small boats working small and hand lines close inshore, and these were credited with about 70 per cent. of the total catch. Other methods of capture in vogue are set-net fishing and seine-net trawling, by which means, in the ratio of 7:5, the remainder of the catch was taken.

Dabs, Whitches, and Megrims.

The quantity of whitches and megrims landed, all but 20 cwts. of which was taken by trawlers, was 48,940 cwts., valued at £51,612, or 12,276 cwts. and £13,900 more than in 1912. These increases were due principally to whitches, which improved upon the previous year's returns to the extent of 11,400 cwts., or 60 per cent., in quantity, and £10,039, or 52 per cent. in value.

Of dabs some 700 cwts. less were marketed than in 1912, the figures being respectively 9907 cwts. and 10,601 cwts. These fish, although the least valuable of all flat-fish, advanced in price during the year, the values recorded for 1913 and 1912 being respectively £4039 and £3849.

Turbot and Brill.

A further decline falls to be recorded in the catch of turbot, the catch of 3791 cwts. falling short of that of 1912 by 247 cwts., and the value, which was £12,625, by £1220. This decline, which has been in progress since 1909, although comparatively slight from year to year, goes on steadily, as the following table shows :—

Year.	Annual Catch.
1909	6346 cwts.
1910	4987 ,,
1911	4529 ,,
1912	4038 ,,
1913	3791 ,,

From these figures it will be seen that in the course of the last five years the annual delivery has decreased by 40 per cent.

All but 78 cwts. of the catch was landed by trawlers, Leith in this particular instance taking precedence of Aberdeen.

Notwithstanding the curtailed supply, prices were lower than in 1912, the average price per cwt. being £3 6s. 7d., or 2s. less than in the preceding year.

Of Brill 208 cwts., valued at £422, were landed, as against 258 cwts. and £560 in 1912.

(c) *SKATE, SQUIDS, AND UNCLASSIFIED FISH.*

The total quantity of skate marketed in 1913 was 135,498 cwts., valued at £35,817, as compared with 144,010 cwts. and £37,085 in 1912, trawlers and steam liners together accounting for 92 per cent. of the catch, in roughly equal proportions.

Only 28 cwts. of squid, which realised £3, were landed, as against 157 cwts. and £57 in 1912.

The supplies of unclassified fish, which comprise bream, pollack, mullet, etc., totalled 23,582 cwts., valued at £3777, as compared with 10,693 cwts. and £2135 in 1912. This large increase was due principally to the exceptionally large quantity of bream landed at Aberdeen in the course of the year.

SUMMARY SHOWING CATCH AND VALUE DURING PAST TEN YEARS.—The following table shows the catch and value of fish (exclusive of shell-fish) taken by the different methods of fishing since 1904 inclusive :—

YEARS.	(1) *HERRINGS, ETC.			(2) ROUND-FISH.					
	Net.			Line and Net.			Trawl.		
	Cwts.	£	Price per Cwt.	Cwts.	£	Price per Cwt.	Cwts.	£	Price per Cwt.
1904	5,488,456	1,028,160	3/9	628,898	279,428	8/10	1,520,949	618,687	8/1
1905	5,375,225	1,352,421	5/	619,194	274,754	8/10	1,563,247	729,822	9/4
1906	5,016,220	1,661,178	6/7	601,033	282,144	9/5	1,683,335	722,680	8/7
1907	6,321,211	1,814,330	5/9	529,962	262,817	9/11	1,874,411	754,849	8/1
1908	5,728,157	1,161,111	4/1	670,946	264,274	7/11	1,910,038	756,569	8/
1909	4,592,457	1,583,296	6/11	667,432	248,639	7/5	1,828,570	735,471	8/1
1910	5,741,057	1,609,048	5/7	712,099	272,159	7/8	1,898,014	875,478	9/3
1911	5,120,658	1,520,035	5/11	779,232	292,907	7/6	2,235,177	886,970	7/11
1912	5,255,307	1,922,204	7/4	777,883	302,090	7/9	2,197,014	1,002,400	9/2
1913	4,532,093	2,100,619	9/3	617,826	277,931	9/	2,316,437	1,166,368	10/1

YEARS.	(3) ‡FLAT-FISH.						(4) §SKATES, SQUIDS, AND UNCLASSIFIED FISH.					
	Line and Net.			Trawl.			Line and Net.			Trawl.		
	Cwts.	£	Price per Cwt.	Cwts.	£	Price per Cwt.	Cwts.	£	Price per Cwt.	Cwt.	£	Price per Cwt.
1904	120,211	80,703	13/5	180,709	221,212	24/6	4,631	1,054	4/7	3,975	1,858	9/4
1905	111,041	72,961	13/2	177,472	216,443	24/1	5,419	895	3/4	4,712	1,852	8/
1906	46,431	59,644	25/8	137,496	220,267	32/	61,388	18,887	6/2	47,466	12,793	5/5
1907	54,043	69,432	25/8	136,502	218,705	32/1	51,601	16,797	6/6	50,423	12,197	4/10
1908	71,072	93,423	26/3	128,843	203,491	31/7	82,666	21,382	5/2	53,530	11,912	4/5
1909	66,568	86,152	25/11	144,966	207,433	28/7	76,519	17,761	4/8	46,673	10,355	4/5
1910	64,847	95,178	29/4	145,937	215,297	29/6	89,621	21,026	4/8	58,080	12,201	4/2
1911	71,917	110,495	30/9	145,954	213,541	29/3	101,059	23,317	4/7	57,977	13,309	4/7
1912	65,299	107,115	32/10	136,743	215,498	31/6	95,925	24,982	5/3	58,935	14,295	4/10
1913	59,342	100,973	34/	143,544	239,872	33/5	77,141	21,722	5/8	81,967	17,875	4/4

TOTALS.

YEARS.	(1) Total taken by Net and Line.			(2) Total taken by Trawl.			(3) ‖Total quantity and value of all Fish landed.		
	Cwts.	£	Price per Cwt.	Cwts.	£	Price per Cwt.	Cwts.	£	Price per Cwt.
1904	6,242,196	1,389,345	4/5	1,705,633	841,757	9/10	7,947,829	2,231,102	5/7
1905	6,110,879	1,701,031	5/7	1,745,431	948,117	10/10	7,856,310	2,649,148	6/9
1906	5,722,852	2,020,585	7/1	1,870,517	957,008	10/3	7,593,369	2,977,593	7/10
1907	6,956,817	2,163,376	6/3	2,061,336	985,751	9/7	9,018,153	3,149,127	7/
1908	6,552,841	1,540,190	4/8	2,092,411	971,972	9/3	8,645,252	2,512,162	5/10
1909	5,402,976	1,935,848	7/2	2,020,209	953,259	9/5	7,423,185	2,889,107	7/9
1910	6,607,624	1,997,411	6/1	2,102,031	1,102,976	10/6	8,709,655	3,100,387	7/1
1911	6,072,866	1,946,754	6/5	2,439,108	1,113,820	9/2	8,511,974	3,060,574	7/2
1912	6,194,414	2,356,391	7/7	2,392,692	1,232,193	10/4	8,587,106	3,588,584	8/4
1913	5,269,068	2,492,369	9/6	2,559,282	1,432,991	11/2	7,828,350	3,925,360	10/

* Include sprats, sparlings, and mackerel, returns of which are immaterial.

† Skate, which scientifically are not classed amongst flat fish, were also included up to and including 1905. As this fish is of much smaller value than the other fish included, the average price of flat-fish was thus considerably lowered, but in 1906 this disturbing factor was removed by the inclusion of skate in another column.

‡ Comprise principally sillocks, lythe, and bream up to and including 1905. From 1906 onwards skate are included.

§ Exclusive of shell-fish.

Note.—Round fish now comprise certain species of fish formerly included under "Unclassified Fish."

(*d*) *SHELL-FISH.*

The shell-fish fisheries were prosecuted with considerably better results than in 1912, the total value, which was £72,357, exceeding that of the preceding year by £4763, and the average for the ten years 1903–1912 by £682. Towards this total the East Coast contributed 35 per cent., Orkney and Shetland 10 per cent., and the West Coast 55 per cent., as compared with 37 per cent., 8 per cent., and 55 per cent. respectively in 1912. The advance made by Orkney and Shetland was due to the success with which lobster fishing was prosecuted in Orkney waters during the year.

Lobsters.

The improvement in the shell-fish returns was mainly due to the increased catch of this crustacean, the number taken in 1913 being 681,059, or 34,493 more than in 1912, while the value, which was £36,775, shows an increase of £4598. Notwithstanding the larger supply, a sharp advance in prices occurred, the average price per hundred, which was 108s., being 8s. more than has ever been realised before.

Crabs.

Crab-fishing was also more successfully prosecuted than in the preceding year, 22,139 hundreds, valued at £14,170, having been captured, as compared with 21,361 hundreds and £13,704 in 1912. The bulk of the increase in quantity and the whole of the increase in value are referable to the East Coast.

Oysters.

The output of oysters was not quite so large in 1913 as in 1912, the figures for the two years being respectively 13,161 hundreds and 13,278 hundreds, but, on the other hand, the value, which is returned at £4757, shows an increase of £88. The whole of the landings, with the exception of 105 hundreds taken in Loch Tarbert, and 2 hundreds in Shetland, was dredged from the well-known beds in Loch Ryan.

Mussels.

The total quantity of mussels gathered in 1913 was 78,576 cwts., the value of which was £4371, as compared with 99,754 cwts. and £5334 in 1912. The lessened output was due to the diminished attention paid to line fishing, and is directly related to the decrease in the length of lines in use shown in Appendix A. No. I.

Clams.

Practically the whole of the clams landed in Scotland are obtained in the Firth of Forth. In 1913 the output amounted to 6853 cwts., which were valued at £1024, as compared with 8300 cwts. and £1236 in the preceding year.

Unclassified Shell-fish.

Unclassified shell-fish consist chiefly of cockles, shrimps, and periwinkles. The total quantity obtained was 41,074 cwts., valued at £11,260, as compared with 40,528 cwts. and £10,474 in 1912.

Summary Showing Catch and Value of Shell-fish during past Ten Years.—The following table shows the quantity and value of the different kinds of shell-fish landed in Scotland since 1904, inclusive :—

Year.	Oysters.			Mussels.			Clams.		
	100's.	Value £.	Price per 100.	Cwts.	Value £.	Price per Cwt.	Cwts.	Value £.	Price per Cwt.
1904	2,501	937	7/6	92,142	6,046	1/2	6,993	944	2/8
1905	2,180	865	7/11	102,927	6,065	1/4	7,848	1,129	2/10
1906	3,896	1,568	8/	128,486	7,222	1/2	7,391	1,083	2/11
1907	10,203	3,456	6/9	126,453	6,334	1/2	7,197	953	2/8
1908	9,424	3,411	7/3	121,161	5,529	/11	8,633	1,264	2/11
1909	12,270	4,414	7/2	109,529	4,881	/11	7,404	1,143	3/1
1910	8,771	3,473	7/11	98,817	4,476	/11	9,947	1,501	3/
1911	11,540	4,075	7/1	103,217	5,066	1/	10,261	1,536	3/
1912	13,278	4,669	7/	99,754	5,334	1/1	8,300	1,236	3/
1913	13,161	4,757	7/3	78,541	4,368	1/1	6,853	1,024	3/

Year.	Lobsters.			Crabs.			Unclassified Shell-fish.			Total Value.
	100's.	Value £.	Price per 100.	100's	Value £.	Price per 100.	Cwts.	Value £.	Price per Cwt.	£
1904	7,964	38,323	96/3	23,993	14,540	12/1	57,031	16,010	5/7	76,800
1905	7,603	36,317	95/6	19,903	11,675	11/9	53,220	14,611	5/6	70,662
1906	7,316	35,957	98/4	20,916	13,182	12/7	45,594	13,310	5/10	72,322
1907	7,149	34,950	97/9	22,176	13,774	12/5	44,749	12,737	5/8	72,204
1908	6,890	33,748	98/	27,367	16,515	12/1	49,263	13,595	5/6	74,062
1909	7,122	33,857	95/1	26,346	15,582	11/10	45,726	12,515	5/6	72,392
1910	6,977	34,795	99/9	22,071	13,831	12/6	46,540	11,684	5/	69,760
1911	6,420	32,101	100/	23,573	14,650	12/5	40,644	9,927	4/11	67,355
1912	6,466	32,177	99/6	21,361	13,704	12/10	40,528	10,474	5/2	67,594
1913	6,812	36,775	108/	22,139	14,170	12/10	41,074	11,260	5/6	72,354

Operations of Scottish Fishermen at English and Irish Herring Fishings.

The number of vessels which proceeded to the English herring fishing was 1163, as compared with 1099 in 1912, the fleet being composed of 854 steamers, 100 motor boats, and 209 sailing boats, as compared with 797 steamers, 71 motor, and 231 sailing boats in the preceding year, so that from the standpoint of effectiveness, the fleet relatively to that of 1912 was much stronger than is indicated by the mere accession of numbers. Year by year the tendency is for sailing boats to drop out of this fishing, the reason being found in the crowded state of the East Anglian ports, which renders some form of mechanical power almost essential in manœuvring to enter and leave harbour. The Irish fishing did not, however, attract so many fishermen as in 1912, only 159 vessels having worked in Irish waters, as compared with 258 in the

preceding year. The results of operations in the sister countries as shown in the following table :—

STATEMENT showing the number of Scottish Fishing Boats employed, and the quantity and value of herrings landed by them at the English and Irish fishings.

Scottish District to which Boats Belong.	Particulars of Fishing on Coasts of England.			Particulars of Fishing on Coasts of Ireland.			Total Cwts.	Total Value.
	Boats.	Cwts.	Value.	Boats.	Cwts.	Value.		
			£			£		£
Eyemouth	46	89,768	25,648	11	14,999	5,712	104,767	31,360
Leith	25	9,665	11,836	1	250	400	9,915	12,236
Anstruther	123	210,465	70,255	2	1,200	480	211,665	70,735
Montrose	55	12,843	15,371	..	..	..	12,843	15,371
Stonehaven	7	3,609	1,397	..	..	..	3,609	1,397
Aberdeen	44	105,445	31,486	..	..	..	105,445	31,486
Peterhead	128	371,980	106,280	5	2,430	1,250	374,410	107,530
Fraserburgh	113	245,473	73,560	12	11,340	5,040	256,813	78,600
Banff	109	241,458	70,184	28	26,355	8,890	267,813	79,074
Buckie	345	804,069	241,200	60	31,500	12,800	835,569	254,000
Findhorn	132	313,798	94,440	40	14,000	6,000	327,798	100,440
Cromarty	2	2,800	760	..	..	..	2,800	760
Helmsdale	9	16,700	5,031	..	..	..	16,700	5,031
Wick	20	45,592	11,660	..	..	..	45,592	11,660
Shetland	5	14,518	4,148	..	..	..	14,518	4,148
Totals	1,163	2,488,183	763,256	159	102,074	40,572	2,590,257	803,828

The results at the English fishing mark a substantial improvement upon the preceding year's notable record, the catch of 2,488,183 cwts. surpassing that of 1912 by 158,810 cwts., while the value was greater by £61,361. The average earnings per vessel were also the highest in the history of the fishing ; but for this the credit must be given entirely to steamers, whose average was £794, as compared with £769 in 1912, as the earnings of motor boats and sailing boats, which were £365 and £235 respectively, compare unfavourably with those obtained in the previous year, viz., £450 and £246.

The East Anglian fishing of 1913 was a truly remarkable one. For a considerable period it appeared as if the season were to be no more successful than the Scottish one, but towards the end of October the situation changed with dramatic suddenness, and within a few weeks the previous year's record total had been overtaken and passed. When the season finally closed, it was found that the total catch amounted to over 1,350,000 crans, or 243,000 crans more than in 1912, and some idea of the intensity of the fishing will be gained when it is stated that nearly half of this catch was landed within three weeks. In one week at Yarmouth alone the landings exceeded the total quantity landed at Fraserburgh during the entire summer season, which lasted about fourteen weeks, while the combined catches at Peterhead, Aberdeen, and Fraserburgh during the same period did not equal the quantity landed in a single fortnight at Yarmouth and Lowestoft.

To cope successfully with the heavy landings threw a heavy strain upon the curing staffs, who for a time were literally working night and day, but not the least remarkable feature of the season was the celerity with which this task was accomplished.

The fleet which repaired to the Irish fishings comprised 146

steamers, 6 motor boats, and 7 sailing boats, as compared with 244 steamers, 5 motor, and 9 sailing boats in 1912; and the total catch amounted to 102,074 cwts., valued at £40,572, as against 103,030 cwts. and £33,808 in the preceding year. It is evident from these figures that the success attained was much greater than in 1912, and this is confirmed by a comparison of the average earnings, which amounted to £239 for steamers, £566 for motor boats, and £327 for sailing boats, as against £128, £221, and £170 respectively in the preceding year. It will be observed from these figures that steamers were for the second year in succession less successful than either motor or sailing boats while engaged in Irish waters.

FISH USED FRESH.

The estimated quantity of fish sold for consumption in Scotland in a fresh state, or dispatched fresh from Scotland, during the year 1913, will be found under Appendix C (page 126).

The returns show that 1,961,853 cwts., or 53,856 cwts. more than in 1912, were thus disposed of, this quantity representing 25 per cent. of the total quantity landed, as against 22 per cent. in the preceding year. Cod and codlings constituted 25 per cent. of the whole, haddocks, 23 per cent., herrings 10 per cent., flat-fish (which are almost without exception all sold fresh) 10 per cent., skate 7 per cent., and whitings 6½ per cent., other important contributors being saithe, ling, and mackerel, in the order given.

As compared with last year's returns, increases of considerable amount are shown by cod and codlings (88,000 cwts.), whitings (54,000 cwts.), ling (23,000 cwts.), haddocks (20,000 cwts.), and mackerel (18,000 cwts.), while by far the largest decrease (131,000 cwts.) is shown by herrings, the only other decreases of any magnitude occurring in conger eels (15,000 cwts.) and skate (8500 cwts.).

In view of the greatly diminished catch of haddocks, the increase in the quantity sold fresh is somewhat striking, and connotes a large falling off in the quantity cured; while the decline in the quantity of herrings consumed fresh is of course explained by the short summer catch and the keen demand for it for curing purposes.

FISH CURED AND EXPORTED.

I. Herrings.

In Scotland the curing industry is an important source of income to a very large number of people. Men and women to the number of nearly 38,000 were in 1913 engaged as coopers, gutters, packers, seamen on carrying vessels, labourers, etc. Of this total, 12,872 consisted of women employed solely in gutting herrings, and their total earnings for the year amounted to about £318,000, or an average per woman of £25 (including arles, wages, lodgings (in England), and train fares). In the Helmsdale district the women workers had the unique experience of bringing more money home than the value of the fish landed in the district during the whole year. Over 3500 came from West Coast districts—chiefly Stornoway and Barra—while the remainder were from East Coast districts—Peterhead, Fraser-

burgh, Shetland, Buckie, and Wick being the principal contributors. To remove and house this army of workers requires a good deal of organising power, and it is a credit to those who employ them that so few complaints are made of the conditions under which the work is carried on. In dealing with such a perishable article it is impracticable to conform with strict regulations as to hours of labour and housing accommodation, but every effort is made to minimise the hardships involved, and in the majority of cases these efforts are successful.

In 1913 the total quantity of herrings landed was 4,449,323 cwts., and of this 4,245,758 cwts., or 95 per cent., were preserved in one way or another. The quantity of herrings pickled, kippered, or tinned was equivalent to 1,616,426 barrels, while the equivalent of 25,614 barrels was sprinkled with salt or iced (Appendix D, No. I.). These figures show a decrease of 135,719 barrels from 1912, but this is due solely to the falling off in the catch.

Of the total cure 985,606 barrels were accounted for on the East Coast, 362,139 in Shetland and Orkney, and 268,681 barrels on the West Coast. The districts contributing the bulk of the total were Peterhead (277,700), Shetland (249,456), Fraserburgh (230,875), Eyemouth (197,335), Stornoway (164,378), Wick (137,778), and Orkney and Aberdeen both slightly over 100,000.

Although the quantity cured was less than in 1912, the quality and condition of the fish showed an improvement, and the price paid for the fresh fish was much higher. The rise in price during the last twenty years has been materially affected by the adoption of the system of selling by auction. Previously curers engaged crews to fish for them at a certain fixed price for the season, and in lean years large profits were made, but in years of plenty the reverse was the case. The consequence was that deep speculation (blank sales) was indulged in, and the results in many cases were disastrous.

The trade is now largely regulated by the laws of supply and demand, and is in a much healthier and sounder condition. As showing the extent of the rise and fall in the price of herrings it may be stated that in 1896 the East Coast herrings realised on the average 10s. 6d. per cran, while last year they averaged 34s. Unfortunately the prices realised for the cured fish were not increased proportionately, and curers in many cases suffered loss. The English fishing, however, proved so successful that the losses sustained were more than redeemed.

The kippering trade showed an upward tendency, but tinning declined largely owing to the high prices ruling for the fresh fish. The chief centres of the former were in Eyemouth, Stornoway, Greenock, Peterhead, Aberdeen, and Fraserburgh districts, while the latter was confined exclusively to East Coast districts, principally Aberdeen and Fraserburgh.

The estimated value of the herrings cured in 1913 (Appendix E, No. IV.) was £2,914,711, or £133,580 in excess of the return for 1912, and £285,000 above the highest record previously reached, as shown in the following table, viz. :—

[TABLE.

Year.	East Coast.	Orkney and Shetland.	West Coast.	Total.	Average Price per Barrel.	
					s.	d.
1898	£905,447	£236,043	£240,656	£1,382,146	15	4
1899	835,956	507,512	370,450	1,713,918	29	2
1900	823,106	542,099	299,469	1,664,674	26	7
1901	739,905	686,965	277,920	1,704,790	21	3
1902	1,235,617	577,531	300,886	2,114,034	23	5
1903	1,005,328	510,023	272,073	1,787,424	22	1
1904	891,841	689,439	234,819	1,816,099	17	7¼
1905	939,684	041,855	247,875	2,229,414	21	1½
1906	1,329,086	1,985,670	230,586	2,545,342	25	5¾
1907	1,641,934	730,652	257,091	2,629,677	20	4¾
1908	1,045,411	736,952	283,714	2,066,077	18	9¼
1909	1,358,802	728,917	281,336	2,369,055	25	0¾
1910	1,482,356	864,023	264,923	2,611,302	22	5
1911	1,320,988	827,960	242,034	2,390,982	23	4½
1912	1,471,336	981,933	327,862	2,781,131	31	9
1913	1,789,499	643,717	481,495	2,914,711	36	0½

Appendix D, No. II., is interesting as showing the development of the industry during the last 103 years. The process of improvement has been gradual, but none the less forward, the figures having risen from 89,934 barrels * in 1811 to 1,886,596 barrels * in 1913.

The number of barrels of cured herrings branded during the year was 246,604, as compared with 174,888 in 1912.

In last year's report reference was made to certain modifications which had been made in the branding regulations with a view to bringing them into line with the changed conditions which now obtain in the herring fishing industry as compared with a few years ago. The principal changes were the extension of the "mattie" brand to herrings taken on or after 1st June, in place of 1st or 10th July as formerly, and the institution of a "filling" brand for "maturing" or "filling" herrings not less than 10¼ inches in length.

The number of barrels presented for the last-named brand was 8741, of which 7723 fulfilled the conditions laid down. The demand for this brand was less than the Board had been led to anticipate, but it is, of course, much too early to form any opinion as to the position it may ultimately occupy. As yet it is insufficiently known among continental consumers, and until they have become familiarised with it it is impossible to judge whether or not it is likely to establish itself in popular favour. On the other hand, there was a brisk demand for the early mattie brand, and having regard to the shortage in the catch, the number which received this stamp (51,427) was very satisfactory.

As has been stated elsewhere, the quality of the summer herrings of 1913 was exceptionally good, and the effect of this is seen in the increased number of barrels of the larger selections which were branded. Thus the number which received the "La Full" brand was 42,578, as compared with 13,085 in 1912, while of the total number of barrels branded, 102,549, or 42 per cent., consisted of "Full" fish.

The total quantity of herrings exported was 1,410,937 barrels, or

* "Sea-sticks." *See* footnote on page 127.

87 per cent. of the total cure (Appendix E, No. II.). The great bulk of these was shipped to Continental ports and consumed in Germany, Austria, and Russia, and 104,045 barrels were sent to America.

In the matter of direct exports Germany resumed the lead which she had relinquished to Russia, although there is reason to suppose that the consumption of herrings in Russia is still greater than that of any other country, notwithstanding the fact that the duty imposed in Germany is 3s. per barrel, and that in Russia is 13s. Fresh herrings are permitted to enter free of duty, while Scottish cured herrings compete with those of their chief rivals—Norway and Holland—on equal terms in the neutral markets.

The following Table shows the export to Germany and Russia direct for the last ten years, viz. :—

Year.	Germany.	Russia.
1904	1,095,683	304,443
1905	1,057,315	430,554
1906	1,025,886	424,200
1907	1,186,100	627,100
1908	1,001,645	616,497
1909	786,682	574,307
1910	982,360	732,345
1911	794,219	655,814
1912	719,012	750,187
1913	672,701	619,680

The principal receiving ports in Russia were St. Petersburg (275,549 barrels), Libau (220,872), and Riga (104,484), while those in Germany were Stettin (263,133), Hamburg (195,572), Königsberg (140,001), and Dantzig (73,995).

The Report of the General Inspector of Sea Fisheries on his visit to the various importing centres on the Continent (published in Jan. 1914) was as usual full of interest to the trade. The principal features touched on were the high prices prevailing, the increased German import of fresh herrings for tinning purposes, improved provision for protecting herrings from sun heat, and the increased cold storage accommodation now available. New markets are continually being opened up by the construction of railways, especially in Russia, and there appears to be no limit to the demand for well cured herrings.

II. Cod, Ling, Haddocks, etc.

The curing of fish other than herrings received a slight check last year largely through scarcity of fish. Cod declined nearly 38,000 cwts. and haddocks almost 99,000 cwts., both substantial declines. Saithe, however, compensated in part by showing an improvement of 45,000 cwts.

The total decrease from 1912 was 86,490 cwts., and the total quantity dried, smoked, pickled, and tinned was 661,234 cwts. (App D, No. I.).

The following figures show the totals of the principal kinds cured since 1903, viz. :—

Year.	Cod.			Ling.		Tusk.		Saithe.		Haddocks.			Mackerel.
	Cwts. Dried.	Cwts. Smoked.	Barrels Pickled.	Cwts. Dried.	Cwts. Smoked.	Cwts. Dried.	Cwts. Smoked.	Cwts. Dried.	Cwts. Smoked.	Cwts. Smoked.	Cwts. Dried.	Cwts. Pickled.	Barrels Pickled.
1903	48,626	23,396	1,290	10,137	5,000	1,601	..	15,272	..	381,156	..	..	..
1904	60,693	110,737	2,147	15,714	2,000	2,019	..	18,831	..	386,604	6,809	6,549	830
1905	65,709	154,353	2,200	21,102	15,290	3,395	1,378	19,406	15,960	340,433	11,709	..	1,473
1906	81,967	124,522	1,741	14,322	12,500	1,993	525	13,983	18,000	292,582	13,512	626	1,389
1907	60,766	123,985	1,256	12,748	10,400	1,035	1,220	10,753	19,200	365,797	12,110	..	1,390
1908	102,527	127,479	1,157	36,239	6,700	2,745	3,990	19,431	25,570	384,985	14,863	216	1,487
1909	95,508	109,537	1,920	32,282	3,320	1,768	3,150	15,387	30,150	279,054	5,172	..	2,153
1910	100,733	112,636	1,165	41,414	3,990	3,004	2,870	19,095	31,920	240,429	5,692	107	2,568
1911	121,465	113,888	1,252	45,266	2,980	5,370	1,110	21,738	32,350	251,128	9,057	..	2,738
1912	180,859	138,107	4,540*	37,972	2,100	4,166	1,200	35,991	40,600	225,127	8,408	..	8,700*
1913	161,722	120,733	3,279	38,810	1,950	4,164	550	66,523	55,360	120,124	13,347	..	5,266

* Shown in cwts. for first time.

The estimated value in a cured state of the cod, haddocks, ling, saithe, etc., so treated was £1,025,431. The smoked fish contributed £640,730 of this total, and the dried fish accounted for £364,952 (App. E, No. IV.).

Almost the whole of this total (£944,546) is returned for Aberdeen.

The total value of all fish cured was nearly four million pounds sterling, by far the highest total on record, and this notwithstanding the substantial shortage in the catch.

VALUE OF CURING YARDS AND OTHER PREMISES CONNECTED WITH THE FISHING INDUSTRY.

At the close of the year inquiries were made with a view to obtaining some indication of the amount of fixed capital invested in the various industries connected with the Scottish fisheries, such as herring curing and kippering, whitefish curing, barrel and box making, boat building, ice and manure factories. The time available proved, however, to be insufficient for the necessary inquiries, and the information obtained can only be regarded as an approximation. It is, however, of interest as supplementing the particulars given in Appendix A, No. 1, as to the fishing fleet.

The value of the premises, including machinery, used for the various shore industries connected with the Scottish fisheries may be stated roughly as one and a half million pounds. It has to be borne in mind in this connection that herring curing does not call for any elaborate or expensive accommodation—that the fixed capital represents but a small proportion of the total capital required for the conduct of the industry, and that a large portion of the whitefish catch is used fresh.

It may be mentioned, further, that no attempt has been made to ascertain the value of the very numerous harbours and piers used by the fishing fleet or in connection with the industry.

Of the total of one and a half millions it is estimated that about £400,000 is attributable to herring curing and kippering yards, £115,000 to whitefish curing premises, £200,000 to ship and boat building yards, and £160,000 to net and other gear factories, the remainder being represented by ice and manure factories, etc.

As is naturally to be expected, Aberdeen district takes premier

position, all branches of the industry, primary and subsidiary, being well represented, while other districts for which substantial totals are returned are Shetland, Peterhead, Fraserburgh, Leith and Greenock.

BY-PRODUCTS.

The manufacture of fish offal into its various by-products, although not conducted on the same scale as in some other countries—notably Norway and the United States—is nevertheless a well-established industry in Scotland, some 25 factories, whose value (including plant) is estimated at £109,000, having been so engaged in 1913.

The industry, as might be expected, is carried on mainly at the important fishing ports on the East Coast, and is centred in Aberdeen, where about half of the factories are situated. Owing to the distance from the factories, the comparatively small quantity of fish landed at the majority of the creeks, and other disabilities, little attempt to utilise fish waste has been made on the West Coast beyond its disposal to neighbouring farmers and crofters, but the quantity of offal available must in the aggregate be considerable, and it is probable that, if its collection were properly organised, the industry would be capable of considerable development.

The principal products derived from fish-offal are fish-meal, which is manufactured from the heads and bones, medicinal and industrial oils from the livers, and oil and manure from the intestines. Medicinal oil is obtained principally from fresh cod livers. Industrial oil is extracted from mixed livers and the intestines, and after being refined is used principally in the process of tanning, the stearine or solid residue going to the soap factories. Fish manure is used chiefly as a fertiliser in beet growing, but it has also been tried on tea and rubber plantations. The meal is used for feeding swine and cattle, and is nearly all exported, principally to the Continent, *via* Hamburg, the United States, *via* New York, Charleston, and Savannah, and to Japan (Yokohama).

It is a difficult matter to ascertain the total production of these commodities, but the figures for Aberdeen may be taken as a reliable criterion, and during 1913 the output from the eleven factories situated in or about that city was as follows :—

	Quantity.	Value.
Fish meal and manure .	6,500 tons	£52,000
Industrial oil . . .	1,430 tons	23,000
Medicinal oil . . .	83,200 gallons	10,400
	Total . .	£85,400

The current market price of fish-meal was £9 10s. per ton, and of manure, £8 10s. The prices paid by the manufacturers for the raw materials were—for hard offal (heads and bones) from 22s. 6d. to 28s. 6d. per ton ; for soft offal (guts, etc.), from 8s. 6d. to 18s. per ton, or an average of 11s. ; for cod livers, 7s. 6d. per cwt. ; and for mixed livers, 5s. per cwt.

Although hardly coming under the category of offal, fish roes form another important by-product, a large quantity being annually

cured and exported to France, where they are used as bait in the sardine fishery. The quantity so dealt with in Aberdeen in 1913 was 2840 barrels, as against 2600 barrels in 1912, the prices realised ranging from 35s. to 56s. per barrel, according to quality and cure. Another method of utilising roes which is growing in importance is that of preserving the milt of the male herring in tins. This article is considered a delicacy wherever it has been tried, and is now being distributed all over the world.

PERSONS ENGAGED IN THE SCOTTISH SEA FISHERIES AND ALLIED INDUSTRIES.

It must always remain difficult to take an exact census of the numbers of persons engaged in connection with the Scottish fisheries, as not only are a considerable proportion of them necessarily migratory in their habits, but many find only partial employment in the industry. The total number who have annually earned at least a substantial portion of their livelihood in the fisheries and allied industries has, however, remained in the vicinity of 90,000 since the present method of compiling the return (Appendix F. No. I. (p. 142)) was adopted in 1896, although the capital and annual output of the industry have in the same period increased so enormously.

For 1913 the total number works out at 90,679, composed roughly of 40,000 fishermen, 20,000 persons engaged in curing, 20,000 in carrying fish, and 10,000 in manufacturing and carrying curing stock. The proportions have remained much the same since 1896. The number for 1913 shows an increase of 964 as compared with 1912. The increase is mainly referable to the greater number of men employed as carters and labourers and in unclassified occupations in Aberdeen.

The effect of the temporary failure of the Shetland herring fishing is seen in the largely decreased number of men, both British and Foreign, returned as having been employed in the carrying trade in that district, the numbers for 1912 and 1913 being respectively 2307 and 1108.

To the total fishing population the scattered districts of Shetland and Stornoway (Lewis and Harris), with their numerous crofter fishermen, contribute most; Buckie, the principal home port of the drifter fleet, and Aberdeen, the headquarters of the trawling industry, come next, followed at intervals by Leith, Fraserburgh, and Peterhead.

The subsidiary occupations are centred mainly at the headquarters of the trawling and steam drifter fleets on the East Coast. Net-making to some extent forms an exception, the largest number so engaged being returned from Greenock district, where flourishing factories exist.

BOAT-BUILDING.

The number of fishing vessels constructed again showed a decrease as compared with the previous year, the total having fallen from 208 to 203.

The number of steam fishing vessels, other than trawlers, which were launched in 1913 was 43, valued at £118,430, or an average of £2754 each, as against 34, valued at £100,500, or an average of £2956 each,

in the preceding year. The Moray Firth districts claimed the majority of those built, while 5 were for England and 3 for Ireland.

The total number of new sailing boats was 129, or a decrease of 11 from the number constructed in 1912. Of these, 63 were of the small third-class type (under 18 feet of keel), 44 were second-class boats (from 18 to 30 feet of keel), 20 were first-class boats (from 30 feet to 45 feet in length of keel), and 2 were first-class boats of over 45 feet keel. Notwithstanding the decrease in the total number built, the total value was £15,481 as against £13,963 for the preceding year—an increase of £1518. Only about 32 of these boats were built for the installation of motor power.

The returns relating to the number and value of steam trawlers built during the year showed only a slight decrease from those of 1912, the numbers being 31, costing £201,500, as against 33, valued at £199,830. These vessels were all built at Aberdeen, and included 8 vessels for English owners and 4 for French.

BARREL MAKING.

The number of barrels and half-barrels manufactured in Scotland in 1913 for the reception of cured herrings was (Appendix G, No. II. p. 150) 3,029,963, an increase of 16 per cent. on 1912, and a record for the industry. This was anticipated in last Report, as all available stocks had been exhausted to enable curers to cope with the heavy landings in the East Anglian autumn fishing. This fishing was again exceptionally productive in 1913, and coopers are accordingly experiencing a period of very regular and remunerative employment. About half as many half-barrels as barrels are now manufactured annually. Twelve years ago the proportion was only about one seventh. The half-barrel is being adopted as it makes a handier package for inland transport on the Continent, and is preferred by the small retailers through whom the herrings finally reach the consumers.

All herring barrels made in Scotland are now hooped partly with wooden and partly with iron hoops. The use of iron hoops on herring barrels was not introduced until 1885, previous to which only wooden hoops were permitted. The use of iron hoops alone has never become popular, but within three years of its introduction the method of hooping with iron and wooden hoops combined had come into general use, and by 1900 it stood practically alone. Fir continues to be the principal wood of which the barrels are made, only 1 per cent. being of other kinds in 1913.

Of the total number of barrels and half-barrels manufactured, the Aberdeenshire ports with Wick and Shetland accounted for 80 per cent.

It is interesting to note that by the Herring Fishery (Branding) Act, 1913, it is required that herrings presented for the official brand in England shall be contained in barrels or half-barrels of the sizes ($26\frac{2}{3}$ and $13\frac{1}{3}$ gallons) so long legalised in Scotland.

BASKET BRANDING.

The number of basket measures examined and branded by the Board's officers in 1913 is also shown in Appendix G, No. II. (p.150.)

The total number so certified was 51,426, an increase of 2 per cent. on the previous year, and about double the number annually branded only twelve years ago. The quarter cran measure was legalised in Scotland in 1889 ; boxes as well as baskets were at first contemplated, but the box has never found favour. The quarter cran basket is now employed in all the important herring fishings around Scotland, except in the Clyde where special circumstances hold, and, like the Scottish herring barrel, has recently (1908) been legalised also in England.

Last year Aberdeen and Leith each furnished about 36 per cent. of the Scottish total ; the Uig factory, in Loch Carron and Skye District, to which attention was directed in recent Reports, appears to have reached its full development meanwhile, as in 1913 its output fell short of that for 1912.

MARINE SUPERINTENDENCE.

The five fishery cruisers belonging to the Board have been fully employed during 1913 in carrying out fishery superintendence around the Scottish Coast. H.M.S. " Ringdove " has also been on duty in Scottish waters during a good portion of the year. This vessel has been principally employed on patrol in the Moray Firth in connection with work by foreign trawlers in that locality, but she also took some part in the superintendence of the great summer herring fishery in Shetland waters. The Board's cruiser " Norna," on account of her sea-going qualities and large bunker capacity, has been employed mainly in Orkney and Shetland waters, but has acted frequently as relief in the Moray Firth. The " Freya " has been mostly employed on the Moray Firth Station, with occasional reliefs to the South Station and to Shetland. The " Brenda " has been generally on the East Coast from Berwick-on-Tweed to Buchan Ness, with occasional reliefs to the Moray Firth, and special duties in the Firth of Forth from time to time. The " Minna " has a very extensive station, comprising the whole coast line from the Mull of Cantyre to Cape Wrath, and including all the numerous islands on the West Coast. During the past year considerable attention and time has been given to the Lewis and Barra coasts. The " Vigilant," as during the past few years, has been most of the year cruising on duty within the Clyde area, with occasional visits to the Solway Firth, and north as far as Stornoway.

When it is necessary to withdraw a cruiser from her station for coaling, boiler cleaning, or annual overhaul, the best arrangements possible are made to divide the patrol up between two other stations. It will be seen from the accompanying table, showing some of the details of the year's work, that the " Freya " again heads the list of the number of detections of illegal trawling, while the " Norna " has again covered by far the greatest distance while cruising during the year. In addition to the usual fishery protection duties, the vessels have been used frequently for various special service calls, and on several occasions during the past year have rendered valuable services in the way of salvage and towage. Among these, the attempted salvage and towage to safety by the " Minna " of the Glasgow Technical Training s.s. " Vivid," after that vessel had struck the rocks off

Colonsay, may be mentioned. The hulls, boilers, and machinery of the vessels have been maintained in a high state of efficiency, and no serious accidents have to be reported.

Particulars.	Name of Cruiser.				
	"Norna."	"Freya."	"Minna."	"Brenda."	"Vigilant."
No. of Days at Sea .	257	238	276	243	275
No. of Knots steamed .	20,345	15,077	15,087	14,121	14,965
No. of Illegal Trawling Detections. .	6	12	2	2	1
No. of Boats detained *re* Lettering and Numbering . .	79	92	156	223	59
No. of Boats cautioned *re* Lights . .	..	..	..	1	41
No. of Foreign Trawlers observed . .	15	35	3	3	1
No. of occasions above reported. . .	43	101	3	3	3
No. of Boats and Vessels given assistance	8	11	3	2	6

TRAWLING IN PROHIBITED AREAS PREVENTION ACT, 1909.

The above-named Act, which was passed with a view to excluding foreign trawlers from working in waters *intra fauces* of Scotland, extended to the whole of the United Kingdom those provisions of the Herring Fishery (Scotland) Act, 1889, which rendered illegal the landing or selling in Scotland of any fish taken by trawlers in prohibited areas. The administration of the Act is vested conjointly in the Board and the Customs authorities.

The Moray Firth is the largest and most important area coming within the operation of the Act, and the following table gives (1) particulars of the number of different foreign trawlers reported as having been observed working in the Firth, and (2) the number of separate occasions on which those trawlers were observed, for the six years ending 19th October last :—

Nationality of Trawlers.	Before Act in Operation.				After Act in Operation.							
	1907–8.		1908–9.		1909–10.		1910–11.		1911–12.		1912–13.	
	Trawlers.	Occasions.	Trawlers.	Occasions.	Trawlers.	Occasions.	Trawlers.	Occasions.	Trawlers.	Occasions.	Trawlers.	Occasions.
Norwegian . . .	16	171	13	112	7	103	8	141	7	84	6	112
Swedish . . .	1	3	...	...	1	1	1	8	8	28	2	7
Danish	8	25	16	99	9	60	1	10	2	14	4	47
Total Scandinavian .	25	199	29	211	17	164	10	159	17	126	12	166
German . . .	1	2	1	1	5	12	16	33	28	55	15	21
Dutch	2	2	6	8	7	15	11	15	10	24	13	29
Belgian . . .	8	27	10	19	9	26	3	6	5	18	6	16
Total .	11	31	17	28	21	53	30	54	43	97	34	66
Grand Total .	36	230	46	239	38	217	40	213	60	223	46	232

The Act was aimed principally at pseudo-Scandinavian trawlers registered in Scandinavian countries, but, as there is good reason to believe, really owned in Britain, and in this respect it will be observed that it has to a certain extent effected its purpose, the average number of such vessels observed at work during the four years subsequent to 1909, as compared with the average for the two years prior to the passing of the Act, having fallen from 27 to 14, and the number of occasions on which they were observed from 205 to 154. Unfortunately, however, the benefit which might thus have accrued has been largely neutralised by the increasing extent to which trawlers of other nationalities have resorted to the Firth, a similar comparison showing that in their case the number of individual vessels has increased from 14 to 32, and the number of occasions on which they were observed at work from 29 to 67.

If, however, the amount of actual trawling has been only slightly lessened, the redistribution of nationalities which has been effected has probably been of real benefit, inasmuch as the Scandinavian vessels work all the year round, whereas the German, Dutch, and Belgian trawlers largely confine their operations to the limited period in the spring during which the cod shoals are present. The cod is a fish upon whose numbers trawling operations appear to make little or no impression, while the diminished intensity of operations throughout the remainder of the year cannot be otherwise than beneficial.

The Firth of Clyde is the only other prohibited area in Scottish waters which has been frequented by foreign trawlers, and trawling there practically ceased with the passing of the Act.

Fish landed in the United Kingdom in contravention of the Act are liable to confiscation by the Customs authorities, but only four such cases have come under the notice of the Board.

ENQUIRIES INTO COMPLAINTS OF DAMAGE TO BOATS OR GEAR.

Particulars of complaints by fishermen of damage to their boats or gear by other fishing vessels, and made to and dealt with by the Board's officers, will be found in Appendix K, No. 1 (p. 157). Altogether, 57 complaints were received by the Board's officers, which number has not been exceeded since the year 1908, when the same number was returned. As compared with 1912 there is an increase in the number of complaints of no less than 25, but it must be observed that this increase is more than accounted for by the number of complaints of damage to cod nets in the Moray Firth, which were not previously shown in the Return.

Since the advent of the cod net-fishing in the Moray Firth a considerable amount of trouble has arisen through the operations of foreign trawlers, and the principal ground for complaint in the Moray Firth districts was the damage to, or loss of, cod nets, 29 cases of this nature having been brought to the notice of the Board's officers during the year.

In a considerable proportion of these cases the offending vessels were not observed or, if observed, were not identified, and it is possible that some of the damage attributed to trawlers was caused by storms. In other cases where evidence that damage was caused by a particular trawler was available, the case was complicated by the fact that the nets had been left unattended or were insufficiently marked or lighted. It is probable that some of the damage was due to carelessness or indifference on the part of the trawlers, but there is good reason to believe that the cause of much of the damage was ignorance, and before the opening of the 1914 fishing the Board took steps to remove this cause as far as possible, and at the same time issued regulations for the marking and lighting of the nets.

Wherever possible the Board endeavoured to obtain compensation for damage to cod nets, but their powers in this respect are limited, and, owing to the circumstances referred to above, little success attended their efforts.

The cases falling within Sec. 7 of the Sea Fisheries Amendment Act, 1885, *i.e.* damage by British fishing vessels to other British fishing vessels or their gear, numbered 21, as against 25 in 1912. Eleven of the complaints were against trawlers, 7 against steam drifters, 2 against sailing boats, and 1 against a motor boat. The amount of compensation recovered through the officers was £70 1s., of which £66 18s. represented damage by trawlers, while one or two cases were outstanding at the close of the year.

In addition to the cases referred to above the officers of the Board investigated numerous claims for damage alleged to have been caused by H.M. war vessels, and during the year sums amounting to at least £676 were paid by the Admiralty.

PROSECUTIONS FOR ILLEGAL TRAWLING.

During 1913 the number of prosecutions for illegal trawling around the Scottish coasts was 29, from which 27 convictions resulted, the

corresponding figures for the previous year being 36 and 30. The decrease exhibited in 1912 as compared with 1911 was thus continued, and, although the numbers have always shown considerable fluctuations in different years, it seems but reasonable to conclude that illegal trawling is not being carried on to the same extent as formerly, since the average number, for the last decade, of prosecutions and convictions was 46 and 43 respectively. The constant patrolling by the Board's cruisers is, no doubt, having a deterrent effect on trawl masters who might be inclined to contravene the law.

The locality in which the greatest number of cases occurred was the Moray Firth, where there were 13 detections—6 foreign and 7 British. Next in order came the Shetland waters with 7, followed by the Outer Hebrides with 4, and the Firth of Forth, the eastern Aberdeenshire Coast, Fair Isle, the Firth of Clyde, and Luce Bay with 1 each. The decrease in the total number was again largely attributable to Fair Isle and the Firth of Forth, which were formerly favourite resorts.

The Board's cruisers detected almost 75 per cent. of the cases, the Admiralty vessel contributing only 1 detection to the total, while fishermen, coastguardsmen, and lighthouse keepers were jointly responsible for 7 cases, the fishermen concerned being at Pittenweem, Shetland, Barra, and Luce Bay. In 2 of the cases brought to trial, the verdict " Not proven " was arrived at, and in each of these the same foreign trawler was concerned. Of the total of 6 foreign trawlers prosecuted, all were in the Moray Forth, and of the 7 British vessels detected there, 3 were inside the 3-mile limit.

Owing to the small number of prosecutions and convictions, the total amount of fines imposed (£1345) was less than in 1912, the difference amounting to £185, though the average of £51 was the same for the two years. In 9 of the cases, however, the convicted masters elected to go to prison rather than pay the fine, and the total fines paid amounted to only £720, this representing an increase of £122 13s. 4d. over the previous year's figure.

In Appendix K, No. II. (p. 165) will be found full particulars of the prosecutions for illegal trawling for 1913, while Appendix K, No. IV. (p. 170) contains a summary of the prosecutions since the year 1886.

PROSECUTIONS FOR OTHER OFFENCES.

Particulars of prosecutions of masters of fishing vessels for offences other than illegal trawling will be found in Appendix K, No. III. It will be observed that there were only 4 such cases. Three of them were in connection with trawling offences and related to the concealment of distinguishing letters and numbers, the failure to exhibit the regulation lights to be shown while trawling by night, and the obstruction of a Sea Fishery Officer while he was exercising the powers conferred on him by the Sea Fisheries Act, 1883. In the last-mentioned case the Chief Officer of the Fishery Cruiser " Freya," after boarding the Norwegian trawler "Norseman," S.D. 4, in order to charge the master with illegal trawling, was carried off by the trawler to Ostend. Unfortunately, when this case was brought to trial, the Sheriff held the charge to be irrelevant. The remaining case was for a breach of the weekly herring fishing close time in Loch Ryan, and the penalty imposed was merely a nominal one.

CASUALTIES.

In Appendix F. No. III. (p. 146), particulars are given of the number of lives lost, and the pecuniary loss sustained through the loss of, or damage to, boats and fishing gear in 1913.

Thirty fatal accidents occurred during the year, being 1 less than in the previous year. Twelve persons met their deaths through the foundering of their boats, 8 fell overboard, 6 were washed overboard, and 4 were knocked overboard or killed by sails.

A very gratifying feature of the return is that a decrease of 22 boats and £15,540 from the previous year falls to be recorded in the number of boats totally destroyed and the value thereof, the totals for 1913 being 39 and £21,089 respectively. The number of boats damaged (828) shows a decrease of 3, but unfortunately the amount of damage increased from £27,647 in 1912 to £31,981 ; while the loss sustained through the loss of, or damage to, fishing gear has increased from £69,087 in 1912 to £73,942 in 1913, the greater portion of such increase being applicable to the trawling fleet. The total pecuniary loss thus amounted to £127,012 as compared with £133,363 in the previous year ; but these figures do not include the losses sustained by the Scottish fleet at the English and Irish fishings, which were, as usual, considerable.

COMPLAINTS OF DAMAGE TO SUBMARINE TELEGRAPH CABLES BY TRAWLERS.

As a result of complaints that damage was being caused to telegraph cables by the fishing gear of trawlers, an Inter-departmental Committee was appointed in July 1908 to inquire into the matter. It was subsequently recommended that a systematic inspection of trawl gear should be instituted as a method of protection against the possibility of further damage to cables, and for this purpose Inspectors were appointed by the Board and by the Fishery Departments in England and Ireland.

The Board undertook their share of the work by appointing as Inspectors the fishery officers of Aberdeen, Leith, and Montrose—the three ports in Scotland most frequented by trawlers. On every occasion of their rounds of inspection the officers received every assistance and courtesy from trawl owners, managers, superintendents, and masters of vessels. The factories where trawl boards are manufactured were regularly visited, and the construction of the boards was found to be in every respect satisfactory.

Beyond minor defects, such as loose bolts, weak and worn iron straps, and ragged edges, there were no complaints regarding the condition of the boards examined, and such defects were always remedied before the vessels proceeded to sea.

The following return shows the number of trawlers inspected during 1913, distinguishing between (1) Scottish, (2) English, and (3) Foreign :—

Port.	Number Inspected.			Number found Defective.		
	Scottish.	English.	Foreign.	Scottish.	English.	Foreign.
Aberdeen . . .	3,599	180	531	518	1	4
Leith . . .	304	22	..	3	1	..
Montrose . . .	106	2	..	6	..	..
Total .	4,009	204	531	527	2	4

The measures adopted in the United Kingdom have resulted in a substantial reduction in the number of cases of injury to cables, but they could not be regarded as complete until similar steps had been taken by other countries, and with this object in view H.M. Government invited the States of Western Europe more particularly interested both in trawling and submarine telegraphic communication to send delegates to a preliminary conference for the purpose of an interchange of opinions on the subject. This conference, at which Belgium, Denmark, France, Germany, Holland, Norway, Portugal, Spain, Sweden, and the United Kingdom were represented, was held in June last, and after deliberations which extended over five days, a series of resolutions designed to effect the object for which the conference had been held was formally passed.

WHALING.

There was a further decline in the catch of whales in Scottish waters in 1913 which, although slight in actual numbers, was, relatively to the number of vessels employed, considerable, and as this decline is in keeping with what has happened on all the grounds in the northern hemisphere, there now seems little room for doubt that the stock of these cetaceans has been seriously reduced. The extent of the decline will be seen from the following table, which shows the annual catch, the number of steamers employed, and the average catch per steamer, since the inception of whaling in Scottish waters in 1903.

Year.	Catch.	No. of Steamers employed.	Average Catch per Steamer.
	No.		No.
1903	127	2	63·5
1904	327	10	32·7
1905	533	13	41
1906	710	13	54·6
1907	600	12	50
1908	651	11	59·2
1909	730	11	66·4
1910	615	11	55·9
1911	503	11	45·7
1912	440	11	40
1913	437	13	33·6

It will be observed that while the catch fluctuated considerably in the years 1903 to 1909, it appears to have reached its culminating point in the latter year, since when there has been a continuous and rapid decline which has been barely stemmed by the employment of two additional steamers during the year under review. Had the additional vessels not been employed the catch, on the basis of the preceding year's figures, would have fallen to 369. The figures as to the average catch per steamer are equally significant, those for 1913 being the second lowest of the series.

The evidence furnished by this table as to the depletion of the stock is also supported by the fact that the average size of the whales taken is declining year by year. Thus only 22 of 70 feet and upwards in length were captured during the year under review, as against 62 in 1910 and 73 in 1909, from which it may be inferred that whales are being taken in increasing numbers before attaining their full growth.

Further corroboration is afforded by the fact that fewer voyages are made each season, not, as might perhaps be supposed, owing to any slackening of energy on the part of the whalers, but to the increasing length of time which is spent at sea before a whale is sighted.

It should be stated, however, that the falling off in the catch is to a certain extent attributed by the Norwegians themselves to the employment of less skilful gunners, the most expert of whom are now in the Antarctic, although having regard to the ever-increasing intensity of whaling operations in every quarter of the globe, it is not surprising that the stock should shows signs of diminution.

The number, species, and sex of the whales taken in 1913 are shown in the following table :—

Species.	Male.	Female.	Total 1913.	Total 1912.
Finner (*Balaenoptera musculus*) .	136	123	259	292
Sei (*B. Borealis*)	74	85	159	108
Sperm (*Physeter macrocephalus*) .	8	—	8	9
Bottlenose (*Hyperoodon*) . . .	4	3	7	8
Blue (*B. Sibbaldi*)	2	—	2	12
Northcaper (*Balaena Biscayensis*) .	—	1	1	11
Humpback (*Megaptera*) . . .	1	—	1	—
Totals	225	212	437	440

Finner and Sei whales were again the mainstay of the industry, and if it were not for these species, indeed, it would not be worth pursuing, at all events in Scottish waters. Every species, it will be observed, shows a decline except the Sei whale, which for some reason —probably, as it is the typical plankton-feeding whale, because those organisms were unusually abundant—visited Shetland waters in exceptional numbers during the summer of 1913, but for which circumstance the catch would have been a very indifferent one. The "fish" were, as a rule, in somewhat poor condition, but the solitary Northcaper taken was a notable exception. This specimen yielded 120 barrels of oil, which realised about £300 ; and if to this be added the proceeds of about 6 cwts. of right whale bone, the current price of which was about £1100 per ton, the value of this particular whale will be readily appreciated.

In securing the catch 13 steamers were employed, as compared with 11 in 1912, two of the companies having, in accordance with the provisions of Sec. 2 (4) of the Whale Fisheries (Scotland) Act, 1907, been granted permission to employ an additional steamer each. The aggregate tonnage of these vessels was 491 tons, and their value £54,000, as against 469 tons and £51,800 in 1912. The crews of these vessels numbered 129, as compared with 110 in the preceding year, all of whom were Norwegians. During the season, which lasted from April to September, 411 voyages were made, or an average of 31 per vessel, as compared with 391, and an average of 36, in 1912.

At the height of the season the operations carried on on shore gave employment to 270 men, of whom 129 were Norwegian and 141 British, as compared with 138 Norwegians and 143 British in the preceding year, the net decrease of 11 being attributable to the smaller number of whales which fell to be dealt with.

These statistics may be summarised as follows :—

	No. of Steamers.	Total Tonnage.	Total Value.	Men engaged on Steamers.	Men employed in Factories (Maximum Number).		No. of Voyages made.
			£		Brit.	Foreign.	
1913	13	491	54,000	129	141	129	411
1912	11	469	51,800	110	143	138	391

The quantity and value of the various products of the industry are shown in the following table, together with the corresponding figures for 1912 :—

Products.	1913.			1912.		
	Weight.	Value.	Average Price per Ton.	Weight.	Value.	Average Price per Ton.
	Tons.	£	£ s.	Tons.	£	£ s.
Oil . . .	1,723	32,348	18 15	2,060	33,396	16 4
Cattle Food .	221	1,657	7 10	336	2,555	7 12
Bonemeal . .	121	449	3 14	218	863	3 19
Manure . .	963	6,381	6 12	957	5,810	6 1
Whalebone .	44	1,831	41 16	44	3,562	80 1
Spermaceti .	85	2,022	23 16	102	2,462	24 3
		44,688			48,648	

The above table shows that there was a falling off in the production of every commodity except manure and whalebone, which is only to be expected in view of the decreased catch and inferior condition of the whales. The most noteworthy feature is the substantial advance in the price realised for oil. This was due to the adoption of improved methods of refining the raw oil, and the improvement so effected resulted in whale oil frequently realising higher prices than the vegetable oils, with which it formerly had some difficulty in competing. The drop in the price of whalebone was due to the almost complete absence from the catch of the Northcaper (Atlantic right

whale), which is the only species whose whalebone approaches in value that of the Greenland whale.

The average value of each whale captured was £102, as compared with £111 in the preceding year.

PART II.

SALMON FISHERIES.

During the last season, 1913, the take of salmon throughout Scotland shows an increase of 27 tons as compared with the take of the previous year. It is 152 tons more than the last quinquennial average (for the period 1904 to 1908). The whole coast line has been divided as usual into four areas, and the weight of salmon carried by the railways and steamships show that 2,017 tons of salmon were marketed in 1913. The totals for the four areas are :—Berwick to Cairnbulg Point, 1,061 tons ; Cairnbulg to Cape Wrath, 707 tons ; Cape Wrath to Glasgow, 152 tons ; Glasgow to the limits of the Annan district in the Solway, 96 tons.

The year 1913 completes another quinquennial period, and the total average is found to be 2,056 tons. This is the fifth quinquennial average, and in the following table will be found these averages together with the details of the last period. In 1913 the West Coast districts showed a decline, which to some extent detracted from the increase on the East Coast. The decline is largely due to an absence of grilse and sea trout.

District.	Average, 1894 to 1898.				Average, 1899 to 1903.				Average, 1904 to 1908.				Year 1909.				Year 1910.			
	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.
a Berwick to Cairnbulg Point,	1,206	18	1	1	839	1	2	9	887	8	2	24	1,018	10	3	19	934	2	2	1
b Cairnbulg Point to Cape Wrath,	900	17	3	6	737	10	3	17	608	13	1	19	705	18	–	22	538	8	–	26
c Cape Wrath to Glasgow, . . .	403	7	1	21	274	18	1	27	209	3	3	6	229	15	2	26	207	8	–	21
d Glasgow to the Border, . . .	260	3	2	6	183	6	1	19	160	9	3	15	231	13	3	6	189	11	3	26
Totals, . . .	2,771	7	–	6	2,034	17	1	16	1,865	15	3	8	2,185	18	2	17	1,869	10	3	18

District.	Year 1911.				Year 1912.				Year 1913.				Average, 1909 to 1913.			
	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.
a Berwick to Cairnbulg Point,	1,112	–	–	7	950	15	–	9	1,061	–	3	23	1,015	5	3	17
b Cairnbulg Point to Cape Wrath,	691	12	–	13	679	18	2	16	707	12	3	22	664	14	–	3
c Cape Wrath to Glasgow, . , .	209	17	1	15	226	4	3	21	152	4	–	10	205	2	–	7
d Glasgow to the Border, . . .	206	14	2	10	133	18	–	–	96	8	–	–	171	13	1	3
Totals, . . .	2,220	4	–	17	1,990	16	2	18	2,017	5	3	27	2,056	15	1	3

The chart of curves also given shows the fluctuations graphically from 1894 to last year. There is a rather depressing uniformity

CURVES SHOWING APPROXIMATELY THE TONS OF SALMON CARRIED BY SCOTTISH RAILWAYS & STEAMSHIPS SINCE 1894

Wt. 35949-13-1125-3/14-McF & E

about the low level of the two West Coast lines. Since 1907 they have been in close proximity, and now the line representing the fish sent to market from the group of districts between Glasgow and the river Annan has reached a lower level than ever previously. When the details are regarded, it is seen that while there is a drop at Ayr and a drop at Stranraer, the reduction is for the most part due to a decrease of fish in the Solway, more especially from the Cree, Nith, and Annan districts.

It is impossible to secure absolute accuracy in making these returns, since we are not furnished with reports of the numbers of fish captured, and have to rely upon the courtesy of the railway and steamship companies for such information as we are able to secure of the weight of salmon carried to market.

A return as to weight of salmon is valuable, but in districts where grilse, rather than large adult salmon, form the bulk of the catch, a very inadequate estimate of the state of matters is given by returns of weight alone. It has been pointed out by the Inspector of Salmon Fisheries that in certain districts, notably in the Pentland Firth, 7 or 8 grilse are commonly taken for every salmon, and that in good grilse years 12 or even 13 grilse may be so taken. But these fish being of light weight, it is evident that a great increase or decrease of numbers may obtain without this being materially shown in the weight of fish reported as having been sent to market. Further, as the Inspector has shown, the rate of decline seems to be much greater amongst grilse than amongst salmon, and, when we reflect upon this it seems evident that, since these young fish are the provision for the immediate future, a depreciation may be steady and very considerable without our being in a position to mark it with accuracy.

We have repeatedly urged the need of regular statistics of the salmon catch, and this recommendation was also urged by the Royal Commission on Salmon Fisheries, 1902, who state in their Report (p. 16): "We think this is a case where the public advantage ought to outweigh the private objection, and that powers should be given to the Central Authority in England and Scotland respectively to obtain statistics by methods already adopted for other purposes of Government, by which inquisitorial treatment and unnecessary publication are avoided."

There are 107 Salmon Fishery Districts in Scotland, including the Orkney and Shetland, and the small and relatively numerous catchment basins of the Hebridean Islands. Of these there are 41 provided with Boards for the regulation and protection of salmon fisheries. The salmon fishery rentals of these 41 districts may be stated as fully £145,000. The rentals of the five most important districts are given in the following table :—

[TABLE.

Year.	Tweed.	Tay.	N. Esk.	Dee.	Spey.
	£	£	£	£	£
1900 . .	..	22,548	6,510	18,989	..
1901 . .	..	22,558	6,466	19,418	8,608
1902 . .	..	22,663	6,494	19,455	8,146
1903 . .	15,338	22,648	6,494	18,393	8,147
1904 . .	15,439	23,099	6,494	19,078	7,396
1905 . .	15,499	22,675	6,489	19,332	8,364
1906 . .	15,499	22,838	6,485	19,068	8,740
1907 . .	15,732	23,202	6,490	18,940	8,990
1908 . .	16,093	23,508	6,474	18,893	9,243
1909 . .	16,092	23,715	6,614	18,335	9,396
1910 . .	16,130	23,861	7,620	17,883	9,139
1911 . .	16,130	23,873	7,617	18,005	9,129
1912 .	16,050	23,586	7,597	17,990	10,304
1913 . .	15,930	23,584	7,597	18,153	11,228

In Mr. Calderwood's report will be found reference to the various inspections made by him in 1913, and to other matters of interest. Reports from 34 District Fishery Boards have been received by the Inspector, and a digest of their contents will be found appended to Mr. Calderwood's report.

The work of research into the Life History of the Salmon has been carried on under more favourable circumstances than formerly, a small grant having been obtained on the recommendation of the Development Commissioners. The marking of fish in the sea was commenced, bag nets being erected for this purpose on the Black Isle shore opposite Fort George. Some interesting results have already been obtained, and it is expected that, with the accumulation of further data, information will be received of a wider and more extensive nature, so that we may have a better understanding of the natural conditions which underlie the fluctuations of this important section of our fisheries. Movements of salmon along our coast, where our valuable commercial fisheries are chiefly situated, have hitherto been but little understood. The marking of salmon has been exclusively carried on in rivers. We are able now to conduct both sections of this work, and a paper on each section, by Mr. Calderwood, has been prepared. These, and papers on the study of scales, are produced separately.

PART III.

SCIENTIFIC INVESTIGATIONS.

During the year 1913 the scientific investigations in connection with the sea fisheries were carried on under the supervision of Dr. T. Wemyss Fulton, the Scientific Superintendent, as authorised by the

Board, on the same general lines as in previous years. Most of the research work has been conducted at the Marine Laboratory at the Bay of Nigg, Aberdeen, and other inquiries in relation to the herring and the herring fishery have been made in Lochfyne in continuation of the observations of preceding years, and also in the Moray Firth with reference to the closing of the waters there to the operations of trawlers. The special statistics of the catches of the line-boats in the Moray Firth have been collected monthly through the Fishery Officers as before, and the old trawling stations of the s.s. " Garland " have been periodically examined with a beam trawl by the s.s. " Goldseeker," as frequently as circumstances allowed, and at dates corresponding as far as possible with those of former examinations, both with the beam-trawl and with the otter-trawl. A report on these investigations and on the statistics is in course of preparation.

The fish-cultural work at the Hatchery at the Bay of Nigg was continued in the spring last year throughout the spawning season of the plaice, and is described below. A number of requests for plaice fry were received on behalf of the fishermen at various parts of the coast, and these were as far as possible complied with, consignments being forwarded to Peterhead, Fraserburgh, and St. Combs, and the fry liberated off the coast in the neighbourhood of these localities. The fishermen at various places on the coast have shown interest in the fish hatching work, which they believe has helped to improve the plaice fishing in their neighbourhood. During the last twelve years a total of over 226,000,000 of the fry of the plaice have been liberated along the coast of Aberdeenshire.

THE HATCHING OPERATIONS.

In the course of 1912 several consignments of live plaice were brought to the Hatchery from the " Goldseeker " and placed in the spawning pond, most of the fish having been caught in the Moray Firth. The last consignment was put into the pond on December 27th. As is always the case, a proportion of the fish died subsequently, mostly from injuries received in the process of capture, and the stock at the commencement of the hatching season was not so large as it generally is. As explained in former Reports, the adult plaice of both sexes are retained in a large tidal pond, into the water of which the eggs are shed, and where they are naturally fertilised during the spawning season. The floating eggs are collected at intervals by means of a fine net and transferred to the Dannevig hatching apparatus, hatching taking place in between three or four weeks, as a rule, in the early part of the season, in January and February, and about a week sooner in the latter part of the season, in April and May. The period, however, varies with the temperature. The larval fishes are retained in the apparatus until the yolk-sac is nearly absorbed, when they are transferred to the sea at suitable localities. The first collection of eggs was made on 10th February, and the last on May 8th, a period of 87 days, as compared with a period of 109 days in 1912, when the stock of fish was larger. The temperature of the water in the spawning pond during the season varied from 3 degrees C. in January to 7·6 degrees C. in May.

The estimated number of eggs collected from the spawning-pond

was 6,840,000, a little more than in 1911, but considerably less than in the previous year. The estimated number of fry obtained was 6,320,000, showing therefore a low death rate in the hatching apparatus, rather under eight per cent. The fry were distributed in six lots, the first on 10th March and the last on 26th May. The great bulk of the fry were liberated at Peterhead, Fraserburgh, and St. Combs, smaller quantities at the end of the season being put into the sea locally.

Since the hatching of the plaice was begun at the Bay of Nigg, the estimated number of the eggs which have been dealt with amounts to about 415,890,000 and approximately 324,400,000 fry of the plaice have been put into the sea. During the first two years most of the fry were taken to Lochfyne and liberated there, in continuation of an experiment which was begun some years before with the view of ascertaining the effect of the liberation of the fry on the abundance of the older stages of the fish. The results of this experiment are fully described in the Twenty-Sixth Annual Report. The output of the Hatchery in each year since 1900 is given in the subjoined Table :—

Year.	Eggs Collected.	Fry Liberated.
1900	43,290,000	31,305,000
1901	65,377,000	51,800,000
1902	72,410,000	55,700,000
1903	65,940,000	53,600,000
1904	39,000,000	34,780,000
1905	40,110,000	24,500,000
1906	7,486,000	4,406,000
1907	1,627,000	1,282,000
1908	15,332,000	12,296,000
1909	19,749,000	16,615,000
1910	7,880,000	6,880,000
1911	6,200,000	5,680,000
1912	24,650,000	19,250,000
1913	6,840,000	6,320,000
	451,891,000	324,414,000

Up to the year 1905 the adult plaice required for the breeding stock were obtained by the use of commercial trawlers ; since then the fish have been secured by the s.s. " Goldseeker," mostly from the Moray Firth.

The Investigations on the Herring Fishery in Lochfyne.

The investigations with respect to the failure of the Lochfyne herring fishery were carried on in 1913 as in previous years, as far as the means at disposal permitted. The statistics show that the yield from this once important fishing continues at a low level, though the quantity of herrings caught last year was 864 crans more than in 1912, showing therefore a slight improvement. The first herrings to be caught in the loch appeared in April ; after that there was a gradual increase in the quantity taken until August, from which period a steady decline occurred. The following shows the monthly catch, in cwts., last year :—

April	91	September	1267
May	266	October	112
June	763	November	490
July	3458	December	77
August	4172		

Thus over eighty per cent. of the year's total was taken in the three months, July, August, and September. The shoals of herrings usually enter Lochfyne by way of Kilbrennan Sound, in the Campbeltown district, and it may be noted that the catch of herrings in that district last year was the largest since 1902, and that there has been a steady increase of the quantity taken since 1910. It is to be hoped that this increase will extend into Lochfyne as in former years. Statistics show that the mean annual catch of herrings in Lochfyne for the period 1863–1906 was 25,180 crans, and for the eighteen years up to 1906 it was 27,375 crans, while the greatest quantity taken in any single year was 56,820 crans in 1897. The figures for the last twelve years are as follows :—

Year.	Herrings Caught.	Year.	Herrings Caught.
1902	26,339 crans.	1908	4,070 crans.
1903	21,198 ,,	1909	3,684 ,,
1904	7,827 ,,	1910	10,405 ,,
1905	4,672 ,,	1911	4,672 ,,
1906	5,258 ,,	1912	2,192 ,,
1907	3,914 ,,	1913	3,056 ,,

It may be of interest to give for comparison the statistics referring to the last great period of depression in the Lochfyne herring fishery, which occurred in the seventies of last century, and in particular in 1873 and 1874. At that time the annual catch gradually fell from nearly 40,000 crans in 1868 to 3648 crans in 1873, and then rose, somewhat unsteadily, to the high total of 55,754 crans in 1882. The figures are as follows :—

Year.	Herrings Caught.	Year.	Herrings Caught.
1870	26,909 crans.	1877	19,618 crans.
1871	13,515 ,,	1878	8,890 ,,
1872	9,057 ,,	1879	21,045 ,,
1873	3,648 ,,	1880	22,768 ,,
1874	4,806 ,,	1881	32,943 ,,
1875	13,546 ,,	1882	55,754 ,,
1876	22,836 ,,		

It is stated in the records that a feature of the fishing in the year 1875 was the great abundance of very small herrings in upper Lochfyne, and small herrings often predominated in the catches in the lower loch also.

It is not an easy matter to account for such variations in the movements of the shoals of herrings. Fluctuations in the herring fishery, especially in fjords or arms of the sea, are of not unfrequent occurrence on the coasts of other countries, and have been attributed to various causes, but none of the explanations put forward to account for them

has been generally accepted. Variations in the physical conditions of the water, or in the quantity or kind of the minute floating organisms on which the herring mainly subsists, are believed by many to be the main cause, and since 1904 periodical observations have been carried on in Lochfyne with the object of ascertaining whether this is the correct explanation. At a number of places in the loch a series of temperature observations are made at different levels, and collections of the floating food secured, and it is proposed to continue these investgations until the herrings return to the loch in their former abundance, so that comparison may be instituted between the observations taken in the period of scarcity and those taken in the period of abundance.

As stated above, these investigations were carried on last year as far as possible with the means at disposal. As the fishery cruiser stationed in the district cannot be made available for the observations, the practice has been to hire a small yacht when that can be done (in the summer months), but in winter when yachts are laid up the observations can only be made by means of a fishing-boat, and there are objections to the use of such a craft in winter by the scientific staff. Under these circumstances the Board approached the Development Commissioners with the view of obtaining a grant for the provision and maintenance of a motor boat suitable for the work, and the application has been favourably entertained.

The Natural History of the Lobster.

As stated in last Annual Report, the Board have had under consideration the question of what might be done to promote the lobster fishery and to increase our knowledge of the life-history of the lobster, and of the conditions under which lobster culture might be initiated with advantage. Attention was directed to the lobster pond at Cullipool, Luing, near Oban, which belongs to the West Highland Lobster Company, and in which from 15,000 to 20,000 lobsters can be accommodated. The manager kindly granted facilities for observations and investigations to be made in connection with the lobsters at the pond, and Dr. H. C. Williamson visited Luing for the purpose in July and October. Attempts were made to discover the lobster fry of the year, but without success, and their whereabouts is unknown. A number of small lobsters, under eight inches in length, were taken at Garvelloch by the use of a small-meshed covering on the lobster-creels, about sixty being secured in two months. With regard to the migration of the lobster, very few of those which were labelled were recaptured, and they were invariably retaken within a distance of not more than a quarter of a mile of the place where they were liberated. Two of the lobsters were recaptured twice. The observations on the change of weight of the lobsters while confined in the pond were continued. Fourteen, ten males and four females, were weighed after having been in the pond for from four to five months, and it was found that the weight of four had remained unchanged, two had decreased in weight, and eight had increased by from one quarter of an ounce to two ounces. The difference was thus comparatively small. Experiments were also made with different models of creels. It was found that an ordinary creel covered with small meshed netting fished better than the usual creel.

When the motor boat above referred to is obtained by the Board it is hoped that the experiments and observations in connection with the lobster and the lobster fishery will be extended.

The Influence of Temperature on the Development of the Eggs of the Herring.

It was stated in the Report for last year that experiments had been conducted on behalf of the New Zealand Government on the retardation of the development of the fertilised eggs of the herring, with the view of transporting them to the Dominion, and that the first consignment had been shipped in January last. These eggs, about 60,000 in number, were fertilised at Plymouth on January 10, under the personal supervision of Dr. H. C. Williamson, and placed on board the R.M.S. "Waimana" on 12th January, which then left for New Zealand *via* the Cape of Good Hope, the eggs being in charge of Mr. T. Anderton, the Curator of the Marine Laboratory and Fish Hatchery in New Zealand, who had also on board a stock of live turbot, lobsters, and crabs. Calculated on a temperature-unit basis, a temperature of 35·5 degrees F. would retard the development of the herring eggs for the necessary fifty days, and this temperature was maintained with little variation throughout the voyage. The eggs were in good condition when the Equator was crossed on 24th January, and the outline of the embryo could be easily seen; very few eggs had died. The water at Cape Town was somewhat dirty, and the eggs received a coating of sediment, but up to 6th February the prospect of successfully taking them to New Zealand seemed bright. An accident then occurred, and the supply tank ran dry, and when the water returned it came with great pressure and brought with it an immense quantity of rust and sediment which had accumulated, and the water in which the eggs were placed became "as thick as soup." This condition continued more or less for some days. On 12th February most of the eggs contained dead embryos, and on the 14th the experiment was abandoned (in 47° 26′ S. latitude, 104° 57′ E. longitude). The ova were found to be impregnated through and through with rust, and no trace of a live embryo was detected. None of the embryos had hatched out. The experiment thus failed, but it is of interest to know that the eggs were taken so far as they were.

Development and Improvement of Sea Fisheries.

In conformity with a request of the Development Commissioners, the Board, after consultation and conference with the Board of Agriculture for England and the Department of Agriculture and Technical Instruction for Ireland, and as part of a general plan and agreement between the three departments, prepared a scheme for the acquisition of further knowledge of the sea fisheries and of measures that might be taken for their development and improvement, especially on the West Coast of Scotland. The scheme in question, with relative information as to methods and cost, was submitted to the Development Commissioners in December last, and is now being considered by them.

Fishery Investigations in the North Sea.

Since the 1st April 1910, when the international investigations in the North Sea were placed under the direct control of the Board, the fishery investigations of the research steamer, the "Goldseeker," have been under Dr. Fulton's charge, and have been carried out according to a monthly scheme submitted to and approved by the Board. The following is a summary of the work done last year :—

Trawling Investigations.

In the course of the year 186 hauls were made with the trawl nets, viz., 22 with the ordinary otter-trawl, 118 with the otter-trawl and cod-ends for herring trawling experiments, and 46 with the beam trawl. The herring trawling experiments are referred to below. The hauls, with the beam-trawl were made at the old trawling stations of the "Garland" (the vessel formerly employed in the Board's scientific work), in the Firth of Forth and the Moray Firth. As the investigations of the "Garland" were begun in 1886, and carried on till 1896 in the Firth of Forth and until 1900 in the Moray Firth, comparison of the results as to the relative abundance of the various species of the food-fishes in the two periods will be of value. The trawling with the large otter-trawl was made on various grounds, inshore and offshore.

In most of the hauls (except with the beam-trawl) a small-meshed net was used outside the cod-end in order to catch the smaller fishes which escaped through its meshes.

The great majority of the fishes caught were individually measured, the sizes being recorded, while large numbers were opened and the condition of the reproductive organs ascertained and noted. Observations were also made in many cases on the contents of the stomachs, in order to determine the food upon which the fishes subsist. These records are being worked up for publication.

Migrations and Growth of Fishes.

The number of food-fishes which were "marked" and liberated in 1913 by the "Goldseeker" was 1679, of which 1345 were plaice and 254 cod and codling, the remainder comprising six species. The mark consists of a numbered vulcanite disc, attached to the fish by means of a silver wire, or of a vulcanite stud, also numbered, fixed in position by a rubber ring. The main objects of the marking experiments are to ascertain (1) the migrations of the fish ; (2) their growth ; (3) the intensity with which fishing operations are carried on. For any of these purposes it is necessary that some time should elapse in order that a sufficient amount of evidence may be accumulated for the formulation of satisfactory conclusions. As mentioned in previous Reports, efforts have been chiefly concentrated on the plaice, which is the most immediately important species in connection with the international fishery investigation, and also, as it happens, the fish which is best adapted for this special method of research, most other species succumbing in large numbers to the treatment to which they are necessarily exposed. Since, however, these marking experiments on the plaice have now been carried on for ten years, and since the Inter-

national Council at their last meeting reached certain conclusions with regard to the plaice fishery in the North Sea, it has been decided to discontinue them in the meantime. The particulars in regard to the plaice marked in each of the ten years, and the percentage of recaptures are as follows :—

Year.	Number Liberated.	Number Recaptured.	Percentage Recaptured.
1904 . . .	310	101	32·6
1905 . . .	245	89	36·4
1906 . . .	40	12	(30·0)
1907 . . .	13	6	(46·1)
1908 . . .	259	67	25·9
1909 . . .	336	65	19·3
1910 . . .	1915	986	51·5
1911 . . .	1733	864	49·9
1912 . . .	2165	1018	47·0
1913 . . .	1345	303	22·5
	8361	3511	42·0

It will be observed that the percentage of recaptures varies somewhat, the mean for the ten years (at the end of 1913) being 42. But as many of the marked fishes liberated in any one year are taken in succeeding years—it may be for four or five years—the percentage of recaptures will be yet increased. Of the 1915 plaice marked and liberated in 1910 over half were again taken by fishermen, and mostly by trawlers. The results of some particular experiments give a much higher percentage even than that. A report on the results of the marking experiments from 1904 to 1909 was published last year, and a final report is now being completed.

With reference to the movements of the marked plaice it may be said that a distinction must be drawn between those which have not reached the size of maturity and those which exceed that size. The former do not, as a rule, move far from their ordinary feeding grounds, and they do not appear to take any very definite direction in such movements as they make ; the latter, on the other hand, undertake often long journeys before the spawning season, and in the great majority of instances they move along the East Coast in a northerly direction, that is to say, against the prevailing current. This migration is doubtless to compensate for the southerly drift of the floating eggs and larval fishes from the localities where spawning takes place. Thus many of the adult plaice which had been marked and liberated in the Firth of Forth, or eastwards of the Isle of May, were recaptured off the coast of Aberdeenshire, or in the Moray Firth ; many of those liberated off the coast of Aberdeenshire were again taken in the Moray Firth, or on the North or West Coast, having in such cases traversed the Pentland Firth. In like manner many of the adult plaice liberated in the Moray Firth, or in the vicinity of Fair Isle, were recaptured at the Orkney Isles, or on the North Coast and the West Coast. It is interesting to have determined that the plaice in the Moray Firth are recruited to such an extent from the grounds off the East Coast, and even from the Firth of Forth, by the migration thither of the adult fish. It is also fairly certain, though

direct experimental proof is lacking, and indeed could hardly be obtained, that the grounds to the south are recruited by supplies of floating eggs and larval plaice carried from the Moray Firth by the prevailing current.

Another point on which the marking experiments throw light is the intensity of fishing operations. There is no reason to suppose that the marked plaice are either more liable or less liable to capture than those which exist beside them in their natural condition on the grounds. The proportion of the marked fish recaptured thus offers an indication of the proportion of the natural stock which is within a given time time removed, and this proportion, as above indicated, is larger than might be expected.

The Influence of Marine Currents.

As is indicated above, the part taken by sea currents in distributing the floating eggs and larvæ of the food-fishes may have an important bearing on fishery problems. It influences the migrations of the adult fishes as well as the movement of the eggs and young fishes from one portion of the coast to another, and also the movements of the floating organisms upon which young fishes of almost all species, and certain fishes at all stages of their life, as the herring, principally subsist. An investigation was therefore undertaken, and is now proceeding, to ascertain as completely as possible the course, direction, and rate of the currents along our East Coast and throughout the North Sea generally. For this purpose a large number of sealed bottles, suitably weighted and containing numbered cards for identification, have been thrown into the sea from the "Goldseeker" at various places both near the coast and at a distance from it. Of a total of 5096 drift-bottles of the kind which have been put into the sea to the end of 1913, 943, or 18·5 per cent., have been returned, partly from the British coast and largely from the Continent, more especially from Norway, some of them having been found as far north as the Lofoten Isles and the North Cape, and even on the Murman coast in Barents Sea.

Trawling for Herrings.

During last year, and particularly in autumn, when the commercial fishing is chiefly prosecuted, an extensive investigation was made on the question of trawling for herrings. A detailed report on the subject is in course of completion, but it may be stated here that the enquiry comprised (1) special researches by means of the Board's steamer, the "Goldseeker"; (2) observations by trained men on commercial trawlers engaged in trawling for herrings; (3) observations with experimental drift-nets of different mesh on a herring drifter; (4) observations at the markets where the trawled herrings were landed; (5) observations of a more scientific character at the Marine Laboratory.

A number of selected Fishery Officers, after receiving preliminary training at the Marine Laboratory, accompanied herring-trawlers in September and October, which they were enabled to do by the courtesy of the owners at Aberdeen. Sixteen voyages of this kind were made, during which 526 hauls of the trawl were taken. The total quantity of marketable fishes caught in these voyages was 5247 cwts., of

which 3991 cwts. were herrings, the remainder consisting principally of white fishes, as cod, haddock, etc. Observations were made by each observer as to the quantity and sizes of the herrings and other fishes caught, and very particularly as to the number, proportion, and sizes of those thrown overboard and destroyed; as to the absence or presence of spawning herrings, herring spawn, etc. Samples of herrings and herring-stomachs were sent to the Marine Laboratory for subsequent examination, and observations were made on the temperature and salinity of the water at the place of fishing.

The observations of the "Goldseeker" were designed partly for the same purpose, to determine the number, proportion, and sizes of immature herrings and immature white fishes destroyed by the herring-trawl net; the proportion, sizes, and condition of the herrings taken to market; the presence of mature or actually spawning herrings, or of herring spawn in the net or on the grounds worked over; the nature of the food, etc. Collections were made of the plankton or floating organisms upon which the herrings mainly subsist, and temperature and salinity observations were taken. Numerous experiments were also made with cod-ends of different mesh to ascertain the relation between the size of the mesh and the sizes of the herrings and other fishes captured. During the chief commercial herring-trawling season the "Goldseeker" was engaged on the grounds in the neighbourhood of the Dogger Bank, where the commercial vessels were principally working, and the trawling operations were carried on under the superintendence of an expert herring-trawling skipper, whose services were obtained for the purpose.

As above stated, a full report giving the results of the enquiry in its various branches is now in course of completion.

Observations on the Eggs and Larvæ of Food Fishes.

In addition to the information acquired by ascertaining the condition of the reproductive organs of a large proportion of the fishes taken in the trawl-net, numerous collections were made by special nets of the floating eggs and the young of the food fishes at different seasons and at various localities. By this means information is obtained as to the spawning season and spawning regions of the fishes, and as to the distribution of the eggs. Observations of this kind were made all along the East Coast and eastwards at intervals as far as the Great Fisher Bank, as well as in the Moray Firth and the Firth of Forth. One region in which it is specially desirable to make a series of such observations during the earlier part of the year in particular, when most of the food fishes spawn, is that between the Moray Firth and the Shetland Islands. It is in this area that the great body of Atlantic water enters the North Sea, carrying with it supplies of the eggs and young of the food-fishes, as well as the plankton, or floating organisms so important as the food of fishes.

Change in Membership.

Mr. T. B. Morison, K.C., having in March last resigned his commission as Sheriff of Fife and Kinross, in consequence resigned his position as Deputy-Chairman and Legal Member of the Board, and

the King was pleased, upon the recommendation of the Secretary for Scotland, to nominate and appoint W. Lyon Mackenzie, Esq., K.C., Sheriff of Ayrshire, to succeed Mr. Morison as Deputy-Chairman and Legal Member of the Board.

We have the honour to be,

SIR,

Your most obedient Servants,

ANGUS SUTHERLAND, *Chairman.*
W. LYON MACKENZIE, *Deputy-Chairman.*
D'ARCY W. THOMPSON.
BREADALBANE.
JAMES ARCHIBALD.
JOHN H. IRVIN.
MALCOLM SMITH.

DAVID T. JONES, *Secretary.*

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APPENDIX A.—

MEANS OF CAPTURE.—RETURN for the Year 1913, showing the Number, Tonnage, (excluding Beam and Otter Trawl Vessels); the Number of Persons

No.	DISTRICTS.	FISHING BOATS AND VESSELS (excluding						
		Number.	Tonnage.	Value of Boats.	Value of Nets.			
					Drift.	Seine.	Other Kinds.	Total.
	EAST COAST.			£	£	£	£	£
1	Eyemouth . . .	89	1,218	7,349	5,760	..	..	5,760
2	Leith	311	3,834	27,920	19,950	637	1,921	22,508
3	Anstruther . . .	373	8,030	47,705	35,060	..	748	35,808
4	Montrose . . .	285	3,022	11,698	7,928	..	191	8,119
5	Stonehaven . . .	74	745	2,810	2,400	..	5	2,405
6	Aberdeen . . .	75	390	1,458	920	..	..	920
7	Peterhead . . .	186	2,073	17,911	10,020	..	..	10,020
8	Fraserburgh . . .	489	8,029	59,684	46,920	..	88	47,008
9	Banff	288	4,473	24,200	15,156	..	1,345	16,501
10	Buckie. . . .	410	10,993	96,575	36,400	..	2,560	38,960
11	Findhorn . . .	171	3,631	27,015	20,400	..	2,200	22,600
12	Cromarty . . .	145	1,244	7,788	5,660	16	150	5,826
13	Helmsdale . . .	110	585	3,241	2,475	..	290	2,765
14	Lybster . . .	39	249	677	782	..	..	782
15	Wick	288	2,620	10,485	9,446	..	464	9,910
	East Coast Totals carried down .	3,333	51,136	346,516	219,277	653	9,962	229,892
	Orkney and Shetland.							
16	Orkney . . .	315	2,082	6,935	3,833	..	..	3,833
17	Shetland . . .	551	6,881	36,122	19,560	..	..	19,560
	Orkney and Shetland Totals carried down	866	8,963	43,057	23,393	..	..	23,393
	WEST COAST.							
18	Stornoway . . .	532	4,214	20,425	10,783	..	..	10,783
19	Barra	302	1,774	6,498	5,282	..	..	5,282
20	Loch Broom. . .	330	1,308	7,795	7,805	..	1,679	9,484
21	Loch Carron and Skye .	390	1,274	4,645	5,380	..	350	5,730
22	Fort-William . .	202	498	1,814	1,130	41	154	1,325
23	Campbeltown . .	197	489	2,085	366	672	71	1,109
24	Inveraray . . .	163	576	2,854	408	775	109	1,292
25	Rothesay . . .	82	172	791	335	90	235	660
26	Greenock . . .	111	220	848	154	90	110	354
27	Ballantrae . . .	254	545	2,619	580	75	1,396	2,051
	West Coast Totals carried down .	2,563	11,070	50,374	32,223	1,743	4,104	38,070
	Totals brought down.							
	East Coast . . .	3,333	51,136	346,516	219,277	653	9,962	229,892
	Orkney and Shetland .	866	8,963	43,057	23,393	..	..	23,393
	West Coast . . .	2,563	11,070	50,374	32,223	1,743	4,104	38,070
	Grand Totals for 1913 .	6,762	71,169	439,947	274,893	2,396	14,066	291,355
	Grand Totals for 1912 .	7,331	77,450	494,471	297,395	3,224	14,662	315,281
	Increase in 1913 . .	..	..	..	..	..	..	..
	Decrease in 1913 . .	569	6,281	54,524	22,502	828	596	23,926

No. I.

and Value of the Sailing Boats and Vessels engaged in the Scottish Fishing Industry employed thereon ; and the Extent and Value of Fishing Gear.

Beam and Otter Trawl Vessels) Propelled by Sails or Oars.							No.
Value of Lines.				Value of Bush and Buoy Ropes and Stoppers.	Value of Crab and Lobster Creels.	Grand Total Value.	
Great.	Small.	Hand.	Total.				
£	£	£	£	£	£	£	
51	748	13	812	2,556	458	16,935	1
600	3,583	68	4,251	6,598	951	62,228	2
883	657	36	1,576	11,114	543	96,746	3
619	1,668	15	2,302	2,985	566	25,670	4
348	904	21	1,273	1,095	253	7,836	5
12	732	10	754	859	80	4,071	6
654	3,452	61	4,167	5,015	174	37,287	7
644	1,612	150	2,406	14,440	648	124,186	8
660	2,352	34	3,046	5,328	159	49,234	9
2,528	3,176	43	5,747	13,780	80	155,142	10
210	1,580	16	1,806	6,375	36	57,832	11
15	750	13	778	1,669	51	16,112	12
144	1,275	66	1,485	966	117	8,574	13
16	146	27	189	126	25	1,799	14
92	519	212	823	3,556	1,334	26,108	15
7,476	23,154	785	31,415	76,462	5,475	689,760	
80	99	78	257	1,851	1,496	14,372	16
1,266	1,533	214	3,013	12,308	33	71,036	17
1,346	1,632	292	3,270	14,159	1,529	85,408	
3,332	1,386	94	4,812	3,139	976	40,135	18
462	230	40	732	1,868	828	15,208	19
409	869	124	1,402	1,144	840	20,665	20
537	173	50	760	550	665	12,350	21
262	108	23	393	400	468	4,400	22
163	132	16	311	341	605	4,451	23
8	134	..	142	214	229	4,731	24
..	106	4	110	144	32	1,737	25
21	104	20	145	59	71	1,477	26
410	462	16	888	215	317	6,090	27
5,604	3,704	387	9,695	8,074	5,031	111,244	
7,476	23,154	785	31,415	76,462	5,475	689,760	
1,346	1,632	292	3,270	14,159	1,529	85,408	
5,604	3,704	387	9,695	8,074	5,031	111,244	
14,426	28,490	1,464	44,380	98,695	12,035	886,412	
15,554	30,640	1,550	47,744	107,377	12,497	977,370	
..	..	..	..	..	..	..	
1,128	2,150	86	3,364	8,682	462	90,958	

APPENDIX A.—

MEANS OF CAPTURE.—RETURN for the Year 1913, showing the Number, Tonnage, (excluding Beam and Otter Trawl Vessels); the Number of Persons

No.	DISTRICTS.	FISHING BOATS AND VESSELS (excluding			
		Area of Netting.			
		Drift.	Seine.	Other Kinds.	Total.
	EAST COAST.	Sq. Yds.	Sq. Yds.	Sq. Yds.	Sq. Yds.
1	Eyemouth . . .	1,728,000	..	..	1,728,000
2	Leith	5,929,800	97,780	359,800	6,387,380
3	Anstruther . .	12,084,000	..	298,840	12,382,840
4	Montrose . . .	2,394,000	..	16,864	2,410,864
5	Stonehaven . .	720,000	..	2,880	722,880
6	Aberdeen . . .	276,000	..	..	276,000
7	Peterhead . . .	3,006,000	..	..	3,006,000
8	Fraserburgh . .	14,076,000	..	42,240	14,118,240
9	Banff	5,196,000	..	219,960	5,415,960
10	Buckie . . .	12,480,000	..	1,075,200	13,555,200
11	Findhorn . . .	6,630,000	..	924,000	7,554,000
12	Cromarty . . .	1,684,000	2,520	12,000	1,698,520
13	Helmsdale . . .	962,000	..	52,200	1,014,200
14	Lybster . . .	300,300	..	..	300,300
15	Wick	3,291,600	..	242,240	3,533,840
	East Coast Totals carried down . .	70,757,700	100,300	3,246,224	74,104,224
	Orkney and Shetland.				
16	Orkney . . .	1,533,000	..	..	1,533,000
17	Shetland . . .	5,868,000	..	..	5,868,000
	Orkney and Shetland Totals carried down .	7,401,000	..	..	7,401,000
	WEST COAST.				
18	Stornoway . . .	4,368,000	..	..	4,368,000
19	Barra . . .	1,814,400	..	..	1,814,400
20	Loch Broom . .	2,715,000	..	587,000	3,302,000
21	Loch Carron and Skye .	1,793,000	..	126,000	1,919,000
22	Fort-William . .	493,000	7,200	46,400	546,600
23	Campbeltown . .	172,000	144,000	32,400	348,400
24	Inveraray . . .	136,000	170,500	32,700	339,200
25	Rothesay . . .	160,000	36,000	117,500	313,500
26	Greenock . . .	63,360	27,000	36,100	126,460
27	Ballantrae . . .	290,000	17,700	218,430	526,130
	West Coast Totals carried down . .	12,004,760	402,400	1,196,530	13,603,690
	Totals brought down.				
	East Coast . . .	70,757,700	100,300	3,246,224	74,104,224
	Orkney and Shetland .	7,401,000	..	..	7,401,000
	West Coast . . .	12,004,760	402,400	1,196,530	13,603,690
	Grand Totals for 1913 .	90,163,460	502,700	4,442,754	95,108,914
	Grand Totals for 1912 .	98,177,370	659,000	5,672,896	104,509,266
	Increase in 1913 . .	..	..	..	..
	Decrease in 1913 . .	8,013,910	156,300	1,230,142	9,400,352

No. I—*continued.*

and Value of the Sailing Boats and Vessels engaged in the Scottish Fishing Industry employed thereon ; and the Extent and Value of Fishing Gear.—*contd.*

Beam and Otter Trawl Vessels) PROPELLED BY SAILS OR OARS.—*contd.*

Length of Lines.				Bush and Buoy Ropes and Stoppers.	Crab and Lobster Creels.	Number of Fishermen and Boys.			No.
Great.	Small.	Hand.	Total.			Resident.	Non-Resident.	Total.	
Yards.	Yards.	Yards.	Yards.	Yards.	No.				
40,800	448,800	10,000	499,600	143,340	2,620	218	..	218	1
380,000	1,777,560	26,120	2,183,680	420,000	6,335	1,451	..	1,451	2
635,400	399,600	28,260	1,063,260	634,400	4,340	899	262	1,161	3
452,400	1,202,800	16,680	1,671,880	221,048	2,830	541	..	541	4
232,960	495,360	18,600	746,920	165,600	1,680	181	..	181	5
7,680	449,280	5,760	462,720	59,450	400	156	..	156	6
366,240	1,836,240	48,960	2,251,440	222,440	870	548	72	620	7
457,440	1,119,240	142,800	1,719,480	830,000	3,240	1,342	66	1,408	8
396,000	1,411,200	40,560	1,847,760	400,728	1,057	716	4	720	9
1,516,800	1,905,600	51,840	3,474,240	842,400	530	1,149	..	1,149	10
126,000	1,137,600	20,880	1,284,480	290,700	240	710	10	720	11
11,520	540,000	6,540	558,060	166,990	340	619	..	619	12
115,200	734,400	31,440	881,040	119,900	780	335	..	335	13
11,520	83,520	21,600	116,640	13,370	110	137	..	137	14
59,520	232,320	169,080	460,920	250,410	5,392	856	18	874	15
4,809,480	13,773,520	639,120	19,222,120	4,780,776	30,764	9,858	432	10,290	
46,080	71,280	65,160	182,520	213,400	9,970	856	..	856	16
1,214,400	1,226,880	170,280	2,611,560	615,120	220	2,332	..	2,332	17
1,260,480	1,298,160	235,440	2,794,080	828,520	10,190	3,188	..	3,188	
2,321,640	1,140,480	74,160	3,536,280	485,302	7,836	4,026	..	4,026	18
221,400	72,160	32,940	326,500	330,094	5,520	992	..	992	19
204,500	395,000	85,080	684,580	123,450	4,800	985	..	985	20
411,840	138,720	60,300	610,860	136,200	4,430	858	..	858	21
125,520	49,680	18,780	193,980	47,340	2,340	427	..	427	22
85,300	82,800	12,120	180,220	95,600	3,030	305	..	305	23
4,500	84,240	..	88,740	74,202	1,280	249	..	249	24
..	53,000	2,460	55,460	20,640	320	82	..	82	25
15,120	95,200	14,150	124,470	13,490	470	118	..	118	26
295,200	277,200	5,340	577,740	96,348	2,060	320	..	320	27
3,685,020	2,388,480	305,330	6,378,830	1,422,666	32,086	8,362	..	8,362	
4,809,480	13,773,520	639,120	19,222,120	4,780,776	30,764	9,858	432	10,290	
1,260,480	1,298,160	235,440	2,794,080	828,520	10,190	3,188	..	3,188	
3,685,020	2,388,480	305,330	6,378,830	1,422,666	32,086	8,362	..	8,362	
9,754,980	17,460,160	1,179,890	28,395,030	7,031,962	73,040	21,408	432	21,840	
10,504,600	19,137,540	1,258,740	30,900,880	7,533,098	76,637	22,718	588	23,306	
..	..	..	..	..	..	..	..	..	
749,620	1,677,380	78,850	2,505,850	501,136	3,597	1,310	156	1,466	

APPENDIX A.—

MEANS OF CAPTURE.—RETURN for the Year 1913, showing, the Number, Industry; the Number of Persons employed

No.	DISTRICTS.	MOTOR					
		Number.	Tonnage.	Value of Vessels.	Value of Fishing		
					Nets.	Lines.	Bush and Buoy Ropes.
	EAST COAST.			£	£	£	£
1	Eyemouth	44	1,331	32,385	11,540	191	4,124
2	Leith	18	358	8,700	1,700	144	804
3	Anstruther	27	530	11,240	2,320	398	667
4	Montrose	49	632	12,370	2,740	1,586	1,308
5	Stonehaven	2	25	440	..	40	4
6	Aberdeen	1	13	175	60	..	6
7	Peterhead	1	12	300	100	31	55
8	Fraserburgh	18	672	12,240	3,600	140	1,670
9	Banff	18	219	4,260	596	360	162
10	Buckie	12	490	11,700	2,640	..	807
11	Findhorn	8	202	4,100	1,320	..	405
12	Cromarty	..	..	..	..	..	..
13	Helmsdale	2	23	530	270	18	109
14	Lybster	..	..	..	..	..	..
15	Wick	40	501	9,365	1,932	112	674
	East Coast Totals carried down	240	5,008	107,805	28,818	3,020	10,795
	Orkney and Shetland.						
16	Orkney	23	72	1,415	..	106	38
17	Shetland	16	147	4,690	864	673	83
	Orkney and Shetland Totals carried down	39	219	6,105	864	779	121
	WEST COAST.						
18	Stornoway	3	71	1,120	173	30	118
19	Barra	1	17	370	80	9	35
20	Loch Broom	2	16	265	203	29	9
21	Loch Carron and Skye	20	227	3,640	892	103	194
22	Fort-William	14	61	2,393	207	133	94
23	Campbeltown	79	750	10,890	4,865	273	245
24	Inveraray	50	473	6,000	1,836	..	223
25	Rothesay	14	93	1,753	394	67	71
26	Greenock	11	63	1,385	408	21	82
27	Ballantrae	*50	384	5,710	2,374	418	212
	West Coast Totals carried down	244	2,155	33,526	11,432	1,083	1,283
	Totals brought down.						
	East Coast	240	5,008	107,805	28,818	3,020	10,795
	Orkney and Shetland	39	219	6,105	864	779	121
	West Coast	244	2,155	33,526	11,432	1,083	1,283
	Grand Totals for 1913	523	7,382	147,436	41,114	4,882	12,199
	Grand Totals for 1912	356	5,216	108,033	31,340	2,716	8,006
	Increase in 1913	167	2,166	39,403	9,774	2,166	4,193
	Decrease in 1913	..	..	..	..	..	..

* Includes 4 oyster dredgers, valued at £1000, and employing 14 men. The value of the dredges (£80) is included under nets.

No. I—*continued.*

Tonnage, and Value of the Motor Fishing Vessels engaged in the Scottish Fishing thereon; and the Extent and Value of Fishing Gear.

FISHING VESSELS.									
Gear.	Total Value of Vessels and Gear.	Extent of Fishing Gear.			Crab and Lobster Creels.	Number of Fishermen and Boys.			No.
Crab and Lobster Creels.		Nets.	Lines.	Bush and Buoy Ropes.		Resident.	Non-Resident.	Total.	
£	£	Sq. Yds.	Yards.	Yards.	No.				
58	48,298	3,462,000	114,740	152,280	330	270	..	270	1
..	11,348	510,000	56,160	25,400	..	102	..	102	2
..	14,625	802,000	279,960	34,730	..	91	10	101	3
288	18,292	822,000	1,170,600	101,160	1,440	226	..	226	4
..	484	..	22,400	1,200		8	..	8	5
..	241	18,000	..	1,500	..	4	..	4	6
..	486	30,000	17,520	2,720	..	4	..	4	7
..	17,650	1,086,000	90,000	46,500	..	90	..	90	8
..	5,378	172,800	216,000	14,340	..	80	..	80	9
..	15,147	792,000	..	38,880	..	84	..	84	10
..	5,825	432,800	..	18,240	..	45	..	45	11
..	..	..	..	..	..	..	..	..	12
..	927	78,000	10,080	4,780	..	4	..	4	13
..	..	..	..	..		..	..	..	14
140	12,223	681,600	72,840	30,920	560	128	..	128	15
486	150,924	8,887,200	2,050,300	472,650	2,330	1,136	10	1,146	
164	1,723	..	74,160	15,700	1,080	59	..	59	16
..	6,310	240,000	564,960	10,300	..	63	..	63	17
164	8,033	240,000	639,120	26,000	1,080	122	..	122	
..	1,441	69,000	24,720	4,330	..	16	..	16	18
..	494	24,000	4,200	1,680	..	6	..	6	19
..	506	70,500	13,820	1,100	..	8	..	8	20
69	4,898	305,600	79,500	13,660	460	81	..	81	21
58	2,885	66,560	61,560	8,030	470	36	..	36	22
46	16,319	1,232,000	171,760	64,100	230	380	..	380	23
..	8,059	472,500	..	26,256	..	200	..	200	24
..	2,285	129,000	43,360	8,600	..	42	..	42	25
81	1,977	144,250	16,200	14,200	540	42	..	42	26
..	8,714	931,700	297,510	67,260	..	167	..	167	27
254	47,578	3,445,110	712,630	209,216	1,700	978	..	978	
486	150,924	8,887,200	2,050,300	472,650	2,330	1,136	10	1,146	
164	8,033	240,000	639,120	26,000	1,080	122	..	122	
254	47,578	3,445,110	712,630	209,216	1,700	978	..	978	
904	206,535	12,572,310	3,402,050	707,866	5,110	2,236	10	2,246	
474	150,569	9,560,800	1,866,850	499,940	2,777	1,593	22	1,615	
430	55,966	3,011,510	1,535,200	207,926	2,333	643	..	631	
..	..	..	..	..	..	..	12	..	

APPENDIX A.—

MEANS OF CAPTURE.—RETURN for the Year 1913, showing the Number, (excluding Beam and Otter Trawl Vessels); the Number of Persons

No.	DISTRICTS.	STEAM FISHING VESSELS, SCOTTISH						
		Number.	Tonnage.	Value of Vessels.	Value of Fishing Gear.			Total Value of Vessels and Gear.
					Nets.	Lines.	Bush & Buoy Ropes.	
	EAST COAST.			£	£	£	£	£
1	Eyemouth	10	282	16,450	3,220	437	1,216	21,323
2	Leith	10	238	22,400	2,200	840	1,050	26,490
3	Anstruther	61	1,315	115,470	16,523	3,960	5,585	141,538
4	Montrose	9	261	19,600	3,420	450	1,260	24,730
5	Stonehaven	..	..	..	..	..	..	..
6	Aberdeen	65	2,358	141,180	15,600	7,080	6,900	170,760
7	Peterhead	122	3,221	323,300	36,600	3,296	17,891	381,087
8	Fraserburgh	85	2,436	208,200	25,500	370	6,800	240,870
9	Banff	93	2,815	195,300	14,649	630	5,206	215,785
10	Buckie	276	7,270	662,400	82,840	1,368	19,872	766,480
11	Findhorn	122	3,730	298,900	37,800	480	9,760	346,940
12	Cromarty	..	..	..	..	..	..	..
13	Helmsdale	9	210	11,340	2,430	360	864	14,994
14	Lybster	..	..	..	..	..	..	..
15	Wick	14	315	27,440	3,360	11	1,183	31,994
	East Coast Totals carried down	876	24,451	2,041,980	244,142	19,282	77,587	2,382,991
	Orkney and Shetland.							
16	Orkney	..	..	..	..	..	..	..
17	Shetland	5	146	7,000	1,000	113	500	8,613
	Orkney and Shetland Totals carried down	5	146	7,000	1,000	113	500	8,613
	WEST COAST.							
18	Stornoway	3	111	3,000	480	99	159	3,738
19	Barra	..	..	..	..	..	..	..
20	Loch Broom	..	..	..	..	..	..	..
21	Loch Carron and Skye	..	..	..	..	..	..	..
22	Fort-William	..	..	..	..	..	..	..
23	Campbeltown	..	..	..	..	..	..	..
24	Inveraray	..	..	..	..	..	..	..
25	Rothesay	..	..	..	..	..	..	..
26	Greenock	..	..	..	..	..	..	..
27	Ballantrae	..	..	..	..	..	..	..
	West Coast Totals carried down.	3	111	3,000	480	99	159	3,738
	Totals brought down.							
	East Coast	876	24,451	2,041,980	244,142	19,282	77,587	2,382,991
	Orkney and Shetland	5	146	7,000	1,000	113	500	8,613
	West Coast	3	111	3,000	480	99	159	3,738
	Grand Totals for 1913.	884	24,708	2,051,980	245,622	19,494	78,246	2,395,342
	Grand Totals for 1912.	824	22,470	1,953,140	222,780	21,362	71,580	2,268,862
	Increase in 1913.	60	2,238	98,840	22,842	..	6,666	126,480
	Decrease in 1913	..	..	..	..	1,868	..	..

No. I—*continued.*

Tonnage, and Value of the Steam Vessels engaged in the Scottish Fishing Industry employed thereon ; and the Extent and Value of Fishing Gear.

(excluding Beam and Otter Trawl Vessels).

Extent of Fishing Gear.			Number of Fishermen and Boys.			DISTRICTS.	No.
Nets.	Lines.	Bush and Buoy Ropes.	Resident.	Non-Resident.	Total.		
Sq. Yds.	Yards.	Yards.				**EAST COAST.**	
966,000	262,800	43,650	73	..	73	Eyemouth.	1
660,000	420,000	38,000	90	..	90	Leith.	2
5,664,000	2,425,500	257,760	378	90	468	Anstruther.	3
972,000	345,600	47,880	81	..	81	Montrose.	4
..	..	..	..	..	..	Stonehaven.	5
4,704,000	3,398,400	322,500	586	..	586	Aberdeen.	6
10,980,000	1,910,400	684,240	610	244	854	Peterhead.	7
7,650,000	270,000	358,000	522	..	522	Fraserburgh.	8
5,022,000	378,000	294,780	644	..	644	Banff.	9
24,873,600	729,600	1,092,960	1,781	231	2,012	Buckie.	10
12,399,000	288,000	483,120	875	110	985	Findhorn.	11
..	..	..	..	..	..	Cromarty.	12
702,000	144,000	33,120	26	..	26	Helmsdale.	13
..	..	..	..	..	..	Lybster.	14
1,092,000	8,400	56,690	113	12	125	Wick.	15
75,684,600	10,580,700	3,712,700	5,779	687	6,466	East Coast Totals carried down.	
						Orkney and Shetland.	
..	..	..	..	..	..	Orkney.	16
300,000	76,200	21,800	36	10	46	Shetland.	17
300,000	76,200	21,800	36	10	46	Orkney and Shetland Totals carried down.	
						WEST COAST.	
144,000	31,680	10,320	24	..	24	Stornoway.	18
..	..	..	..	..	..	Barra.	19
..	..	..	..	..	..	Loch Broom.	20
..	..	..	..	..	..	Loch Carron and Skye.	21
..	..	..	..	..	..	Fort-William.	22
..	..	..	..	..	..	Campbeltown.	23
..	..	..	..	..	..	Inveraray.	24
..	..	..	..	..	..	Rothesay.	25
..	..	..	..	..	..	Greenock.	26
..	..	..	..	..	..	Ballantrae.	27
144,000	31,680	10,320	24	..	24	West Coast Totals carried down.	
						Totals brought down.	
75,684,600	10,580,700	3,712,700	5,779	687	6,466	East Coast.	
300,000	76,200	21,800	36	10	46	Orkney and Shetland.	
144,000	31,680	10,320	24	..	24	West Coast.	
76,128,600	10,688,580	3,744,820	5,839	697	6,536	Grand Totals for 1913.	
69,160,500	11,803,060	3,589,470	5,579	711	6,290	Grand Totals for 1912.	
6,968,100	..	155,350	260	..	246	Increase in 1913.	
..	1,114,480	..	..	14	..	Decrease in 1913.	

APPENDIX A.—

MEANS OF CAPTURE.—RETURN for the Year 1913, showing the Number, (excluding Beam and Otter Trawl Vessels); the Number of Persons

No.	DISTRICTS.	STEAM FISHING VESSELS, OTHER THAN SCOTTISH						
		Number.	Tonnage.	Value of Vessels.	Value of Fishing Gear.			Total Value of Vessels and Gear.
					Nets.	Lines.	Bush & Buoy Ropes.	
	EAST COAST.			£	£	£	£	£
1	Eyemouth	..	..	..	..	..	..	..
2	Leith	..	..	..	..	..	..	..
3	Anstruther	3	65	3,000	840	216	285	4,341
4	Montrose	..	..	..	..	..	..	..
5	Stonehaven	..	..	..	..	..	..	..
6	Aberdeen	3	184	9,800	..	370	32	10,202
7	Peterhead	35	910	84,000	10,500	42	5,075	99,617
8	Fraserburgh	..	..	..	..	..	..	..
9	Banff	..	..	..	..	..	..	..
10	Buckie	..	..	..	..	..	..	..
11	Findhorn	..	..	..	..	..	..	..
12	Cromarty	..	..	..	..	..	..	..
13	Helmsdale	..	..	..	..	..	..	..
14	Lybster	..	..	..	..	..	..	..
15	Wick	36	828	72,000	8,640	27	2,856	83,523
	East Coast Totals carried down	77	1,987	168,800	19,980	655	8,248	197,683
	Orkney and Shetland.							
16	Orkney	..	..	..	..	..	..	..
17	Shetland	380	13,300	836,000	85,500	380	38,000	959,880
	Orkney and Shetland Totals carried down	380	13,300	836,000	85,500	380	38,000	959,880
	WEST COAST.							
18	Stornoway	..	..	..	..	..	..	..
19	Barra	..	..	..	..	..	..	..
20	Loch Broom	..	..	..	..	..	..	..
21	Loch Carron and Skye	..	..	..	..	..	..	..
22	Fort-William	..	..	..	..	..	..	..
23	Campbeltown	..	..	..	..	..	..	..
24	Inveraray	..	..	..	..	..	..	..
25	Rothesay	..	..	..	..	..	..	..
26	Greenock	..	..	..	..	..	..	..
27	Ballantrae	..	..	..	..	..	..	..
	West Coast Totals carried down	..	..	..	..	..	..	..
	Totals brought down.							
	East Coast	77	1,987	168,800	19,980	655	8,248	197,683
	Orkney and Shetland	380	13,300	836,000	85,500	380	38,000	959,880
	West Coast		..	..	..	..	..	..
	Grand Totals for 1913	457	15,287	1,004,800	105,480	1,035	46,248	1,157,563
	Grand Totals for 1912	408	13,688	888,600	91,960	928	39,833	1,021,321
	Increase in 1913	49	1,599	116,200	13,520	107	6,415	136,242
	Decrease in 1913	..	..	..	..	..	..	..

No. I.—*continued.*

Tonnage, and Value of the Steam Vessels engaged in the Scottish Fishing Industry employed thereon ; and the Extent and Value of Fishing Gear.—*contd.*

(excluding Beam and Otter Trawl Vessels).

Extent of Fishing Gear.			Number of Fishermen and Boys.			DISTRICTS.	No.
Nets.	Lines.	Bush and Buoy Ropes.	Resident.	Non-Resident.	Total.		
Sq. Yds.	Yards.	Yards.				**EAST COAST.**	
..	..	..	..	..	..	Eyemouth.	1
..	..	..	..	..	..	Leith.	2
288,000	132,300	13,200	18	6	24	Anstruther.	3
..	..	..	..	..	..	Montrose.	4
..	..	..	..	..	..	Stonehaven.	5
..	144,000	3,200	27	..	27	Aberdeen.	6
3,150,000	42,000	172,200	..	315	315	Peterhead.	7
..	..	..	..	..	..	Fraserburgh.	8
..	..	..	..	..	..	Banff.	9
..	..	..	..	..	..	Buckie.	10
..	..	..	..	..	..	Findhorn.	11
..	..	..	..	..	..	Cromarty.	12
..	..	..	..	..	..	Helmsdale.	13
..	..	..	..	..	..	Lybster.	14
2,808,000	21,600	145,800	..	324	324	Wick.	15
6,246,000	339,900	334,400	45	645	690	East Coast Totals carried down.	
						Orkney and Shetland.	
..	..	..	..	..	..	Orkney.	16
22,800,000	364,800	1,520,000	..	3,800	3,800	Shetland.	17
22,800,000	364,800	1,520,000	..	3,800	3,800	Orkney and Shetland Totals carried down.	
						WEST COAST.	
..	..	..	..	..	..	Stornoway.	18
..	..	..	..	..	..	Barra.	19
..	..	..	..	..	..	Loch Broom.	20
..	..	..	..	..	..	Loch Carron and Skye.	21
..	..	..	..	..	..	Fort-William.	22
..	..	..	..	..	..	Campbeltown.	23
..	..	..	..	..	..	Inveraray.	24
..	..	..	..	..	..	Rothesay.	25
..	..	..	..	..	..	Greenock.	26
..	..	..	..	..	..	Ballantrae.	27
..	..	..	..	..	..	West Coast Totals carried down.	
						Totals brought down.	
6,246,000	339,900	334,400	45	645	690	East Coast.	
22,800,000	364,800	1,520,000	..	3,800	3,800	Orkney and Shetland.	
..	..	..	..	..	..	West Coast.	
29,046,000	704,700	1,854,400	45	4,445	4,490	Grand Totals for 1913.	
24,724,000	614,700	1,629,560	54	3,978	4,032	Grand Totals for 1912.	
4,322,000	90,000	224,840	..	467	458	Increase in 1913.	
..	..	..	9	..	..	Decrease in 1912.	

APPENDIX A.—

MEANS OF CAPTURE.—RETURN for the Year 1913, showing the Number, (excluding Beam and Otter Trawl Vessels); the Number of Persons

No.	DISTRICTS.	TOTALS OF STEAM FISHING VESSELS						
		Number.	Tonnage.	Value of Vessels.	Value of Fishing Gear.			Total Value of Vessels and Gear.
					Nets.	Lines.	Bush & Buoy Ropes.	
	EAST COAST.			£	£	£	£	£
1	Eyemouth . .	10	282	16,450	3,220	437	1,216	21,323
2	Leith . . .	10	238	22,400	2,200	840	1,050	26,490
3	Anstruther . .	64	1,380	118,470	17,363	4,176	5,870	145,879
4	Montrose . . .	9	261	19,600	3,420	450	1,260	24,730
5	Stonehaven . .	..	..	..	..	..	..	..
6	Aberdeen . . .	68	2,542	150,980	15,600	7,450	6,932	180,962
7	Peterhead . .	157	4,131	407,300	47,100	3,338	22,966	480,704
8	Fraserburgh . .	85	2,436	208,200	25,500	370	6,800	240,870
9	Banff . . .	93	2,815	195,300	14,649	630	5,206	215,785
10	Buckie . . .	276	7,270	662,400	82,840	1,368	19,872	766,480
11	Findhorn . . .	122	3,730	298,900	37,800	480	9,760	346,940
12	Cromarty . . .	..	..	..	..	..	..	..
13	Helmsdale . .	9	210	11,340	2,430	360	864	14,994
14	Lybster . . .	..	..	..	..	..	..	..
15	Wick . . .	50	1,143	99,440	12,000	38	4,039	115,517
	East Coast Totals carried down . .	953	26,438	2,210,780	264,122	19,937	85,835	2,580,674
	Orkney and Shetland.							
16	Orkney . . .	..	..	..	..	..	..	..
17	Shetland . . .	385	13,446	843,000	86,500	493	38,500	968,493
	Orkney and Shetland Totals carried down	385	13,446	843,000	86,500	493	38,500	968,493
	WEST COAST.							
18	Stornoway . .	3	111	3,000	480	99	159	3,738
19	Barra . . .	..	..	..	..	..	..	..
20	Loch Broom . .	..	..	..	..	..	..	..
21	Loch Carron and Skye	..	..	..	..	..	..	..
22	Fort-William . .	..	..	..	..	..	..	..
23	Campbeltown . .	..	..	..	..	..	..	..
24	Inveraray . .	..	..	..	..	..	..	..
25	Rothesay . . .	..	..	..	..	..	..	..
26	Greenock . . .	..	..	..	..	..	..	..
27	Ballantrae . .	..	..	..	..	..	..	..
	West Coast Totals carried down . .	3	111	3,000	480	99	159	3,738
	Totals brought down.							
	East Coast . .	953	26,438	2,210,780	264,122	19,937	85,835	2,580,674
	Orkney and Shetland .	385	13,446	843,000	86,500	493	38,500	968,493
	West Coast . .	3	111	3,000	480	99	159	3,738
	Grand Totals for 1913.	1,341	39,995	3,056,780	351,102	20,529	124,494	3,552,905
	Grand Totals for 1912	1,232	36,158	2,841,740	314,740	22,290	111,413	3,290,183
	Increase in 1913. .	109	3,837	215,040	36,362	..	13,081	262,722
	Decrease in 1913 .	..	..	..	..	1,761	..	..

No. I.—*continued.*

Tonnage, and Value of the Steam Vessels engaged in the Scottish Fishing Industry employed thereon; and the Extent and Value of Fishing Gear.—*contd.*

(excluding Beam and Otter Trawl Vessels).

Extent of Fishing Gear.			Number of Fishermen and Boys.			DISTRICT.	No.
Nets.	Lines.	Bush and Buoy Ropes.	Resident.	Non-Resident.	Total.		
						EAST COAST.	
Sq. Yds.	Yards.	Yards.					
966,000	262,800	43,650	73	..	73	Eyemouth.	1
660,000	420,000	38,000	90	..	90	Leith.	2
5,952,000	2,557,800	270,960	396	96	492	Anstruther.	3
972,000	345,600	47,880	81	..	81	Montrose.	4
..	..	..	..	..	..	Stonehaven.	5
4,704,000	3,542,400	325,700	613	..	613	Aberdeen.	6
14,130,000	1,952,400	856,440	610	559	1,169	Peterhead.	7
7,650,000	270,000	358,000	522	..	522	Fraserburgh.	8
5,022,000	378,000	294,780	644	..	644	Banff.	9
24,873,600	729,600	1,092,960	1,781	231	2,012	Buckie.	10
12,399,000	288,000	483,120	875	110	985	Findhorn.	11
..	..	..	..	..	..	Cromarty.	12
702,000	144,000	33,120	26	..	26	Helmsdale.	13
..	..	..	..	..	..	Lybster.	14
3,900,000	30,000	202,490	113	336	449	Wick.	15
81,930,600	10,920,600	4,047,100	5,824	1,332	7,156	East Coast Totals carried down.	
						Orkney and Shetland.	
..	..	..	..	..	..	Orkney.	16
23,100,000	441,000	1,541,800	36	3,810	3,846	Shetland.	17
23,100,000	441,000	1,541,800	36	3,810	3,846	Orkney and Shetland Totals carried down.	
						WEST COAST.	
144,000	31,680	10,320	24	..	24	Stornoway.	18
..	..	..	..	..	..	Barra.	19
..	..	..	..	..	..	Loch Broom.	20
..	..	..	..	..	..	Loch Carron and Skye.	21
..	..	..	..	..	..	Fort-William.	22
..	..	..	..	..	..	Campbeltown.	23
..	..	..	..	..	..	Inveraray.	24
..	..	..	..	..	..	Rothesay.	25
..	..	..	..	..	..	Greenock.	26
..	..	..	..	..	..	Ballantrae.	27
144,000	31,680	10,320	24	..	24	West Coast Totals carried down.	
						Totals brought down.	
81,930,600	10,920,600	4,047,100	5,824	1,332	7,156	East Coast.	
23,100,000	441,000	1,541,800	36	3,810	3,846	Orkney and Shetland.	
144,000	31,680	10,320	24	..	24	West Coast.	
105,174,600	11,393,280	5,599,220	5,884	5,142	11,026	Grand Totals for 1913.	
93,884,500	12,417,760	5,219,030	5,633	4,689	10,322	Grand Totals for 1912.	
11,290,100	..	380,190	251	453	704	Increase in 1913.	
..	1,024,480	..	..	..	..	Decrease in 1913.	

APPENDIX A.—

MEANS OF CAPTURE.—RETURN for the Year 1913, showing the Number, Tonnage, and distinguishing those propelled by Steam from those propelled by Sails or Oars ;

No.	DISTRICTS.	BEAM AND OTTER									
		Scottish (Propelled by Steam).						Other than (Propelled			
		Number.	Tonnage.	Value. Vessels.	Value. Fishing Gear.	Value. Total.	Men Engaged.	Number.	Tonnage.	Value. Vessels.	Value. Fishing Gear.
	EAST COAST.			£	£	£				£	£
1	Eyemouth	..	..	..	..	..	..	..		..	..
2	Leith	47	2,174	194,430	7,050	201,480	425	4	110	12,000	600
3	Anstruther	..	..	..	..	..	..	..	..	..	..
4	Montrose	9	380	22,250	1,350	23,600	72	..	..	..	..
5	Stonehaven	..	..	..	..	..	..	..	..	..	..
6	Aberdeen	218	13,123	959,900	30,520	990,420	2,145	18	837	52,000	2,520
7	Peterhead	7	491	29,400	980	30,380	63	..	..	..	..
8	Fraserburgh	1	57	2,000	150	2,150	9	..	..	..	..
9	Banff	..	..	..	..	..	..	..	..	..	..
10	Buckie	..	..	..	..	..	..	..	..	..	..
11	Findhorn	..	..	..	..	..	..	..	..	..	..
12	Cromarty	..	..	..	..	..	..	..	..	..	..
13	Helmsdale	..	..	..	..	..	..	..	..	..	..
14	Lybster	..	..	..	..	..	..	..	..	..	..
15	Wick	..	..	..	..	..	..	..	..	..	..
	East Coast Totals carried down	282	16,225	1,207,980	40,050	1,248,030	2,714	22	947	64,000	3,120
	Orkney and Shetland.										
16	Orkney	..	..	..	..	..	..	..	..	..	..
17	Shetland	..	..	..	..	..	..	..	..	..	..
	Orkney and Shetland Totals carried down	..	..	..	..	..	..	..	..	..	..
	WEST COAST.										
18	Stornoway	..	..	..	..	..	..	..	..	..	..
19	Barra	..	..	..	..	..	..	..	..	..	..
20	Loch Broom	..	..	..	..	..	..	..	..	..	..
21	Loch Carron and Skye	..	..	..	..	..	..	..	..	..	..
22	Fort-William	..	..	..	..	..	..	..	..	..	..
23	Campbeltown	..	..	..	..	..	..	..	..	..	..
24	Inveraray	..	..	..	..	..	..	..	..	..	..
25	Rothesay	..	..	..	..	..	..	..	..	..	..
26	Greenock	16	985	70,400	2,000	72,400	141	..	..	..	..
27	Ballantrae	..	..	..	..	..	..	..	..	..	..
	West Coast Totals carried down	16	985	70,400	2,000	72,400	141				
	Totals brought down.										
	East Coast	282	16,225	1,207,980	40,050	1,248,030	2,714	22	947	64,000	3,120
	Orkney and Shetland	..	..	..	..	..	..	..	..	..	..
	West Coast	16	985	70,400	2,000	72,400	141	..	..	..	..
	Grand Totals for 1913.	298	17,210	1,278,380	42,050	1,320,430	2,855	22	947	64,000	3,120
	Grand Totals for 1912.	304	16,765	1,255,490	42,840	1,298,330	2,920	18	754	54,900	2,620
	Increase in 1913	..	445	22,890	..	22,100	..	4	193	9,100	500
	Decrease in 1913	6	..	..	790	..	65	..	..	..	..

Note 1.—The Returns relating to *Scottish* Trawlers are compiled according to the Districts to

Note 2.—The above return does not include 30 foreign trawlers, which fished more or less

No. I.—*continued.*

Value of the Beam and Otter Trawl Vessels engaged in the Scottish Fishing Industry, the Number of Persons employed thereon ; and the Value of Fishing Gear.

TRAWL VESSELS.														
Scottish by Steam).		Scottish (Propelled by Sails).						TOTAL.						No.
				Value.						Value.				
Total.	Men Engaged.	Number.	Tonnage.	Vessels.	Fishing Gear.	Total.	Men Engaged.	Number.	Tonnage.	Vessels.	Fishing Gear.	Total.	Men Engaged.	
£				£	£	£				£	£	£		
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
12,600	36	..	..	..	..	..	..	51	2,284	206,430	7,650	214,080	461	2
..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
..	..	..	..	..	..	..	..	9	380	22,250	1,350	23,600	72	4
..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
54,520	165	..	..	..	..	..	..	236	13,960	1,011,900	33,040	1,044,940	2,310	6
..	..	..	..	..	..	..	..	7	491	29,400	980	30,380	63	7
..	..	..	..	..	..	..	..	1	57	2,000	150	2,150	9	8
..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
..	..	..	..	..	..	..	..	..	..	..	..	..	..	13
..	..	..	..	..	..	..	..	..	..	..	..	..	..	14
..	..	..	..	..	..	..	..	..	..	..	..	..	..	15
67,120	201	..	..	..	..	..	..	304	17,172	1,271,980	43,170	1,315,150	2,915	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	16
..	..	..	..	..	..	..	..	..	..	..	..	..	..	17
..	..	..	..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	18
..	..	..	..	..	..	..	..	..	..	..	..	..	..	19
..	..	..	..	..	..	..	..	..	..	..	..	..	..	20
..	..	..	..	..	..	..	..	..	..	..	..	..	..	21
..	..	..	..	..	..	..	..	..	..	..	..	..	..	22
..	..	..	..	..	..	..	..	..	..	..	..	..	..	23
..	..	..	..	..	..	..	..	..	..	..	..	..	..	24
..	..	..	..	..	..	..	..	..	..	..	..	..	..	25
..	..	..	..	..	..	..	..	16	985	70,400	2,000	72,400	141	26
..	..	45	202	1,710	840	2,550	94	45	202	1,710	840	2,550	94	27
..	..	45	202	1,710	840	2,550	94	61	1,187	72,110	2,840	74,950	235	
67,120	201	..	..	..	..	..	..	304	17,172	1,271,980	43,170	1,315,150	2,915	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	
..	..	45	202	1,710	840	2,550	94	61	1,187	72,110	2,840	74,950	235	
67,120	201	45	202	1,710	840	2,550	94	365	18,359	1,344,090	46,010	1,390,100	3,150	
57,520	161	49	247	2,210	920	3,130	110	371	17,766	1,312,600	46,380	1,358,980	3,191	
9,600	40	..	..	..	..	..	..	..	593	31,490	..	31,120	..	
..	..	4	45	500	80	580	16	6	..	..	370	..	41	

which they belong ; but in the case of others, according to the Districts from which they fish. regularly from Aberdeen. These vessels aggregated 1980 tons, were valued, including gear, at £154,200, and employed 390 men.

APPENDIX A.—

MEANS OF CAPTURE.—RETURN for the Year 1913, showing the Number, Tonnage, of Persons employed thereon,

No.	DISTRICTS.	STEAM TRAWLERS.						OTHER STEAM		
		Number.	Tonnage.	Men Engaged.	Value of Vessels.	Value of Fishing Gear.	Total Value.	Number.	Tonnage.	Men Engaged.
	EAST COAST.				£	£	£			
1	Eyemouth	..	..	..	..	..	..	10	282	73
2	Leith	51	2,284	461	206,430	7,650	214,080	10	238	90
3	Anstruther	..	..	..	..	..	..	64	1,380	492
4	Montrose	9	380	72	22,250	1,350	23,600	9	261	81
5	Stonehaven	..	..	..	..	..	..	..	..	..
6	Aberdeen	236	13,960	2,310	1,011,900	33,040	1,044,940	68	2,542	613
7	Peterhead	7	491	63	29,400	980	30,380	157	4,131	1,169
8	Fraserburgh	1	57	9	2,000	150	2,150	85	2,436	522
9	Banff	..	..	..	..	..	..	93	2,815	644
10	Buckie	..	..	..	..	..	..	276	7,270	2,012
11	Findhorn	..	..	..	..	..	..	122	3,730	985
12	Cromarty	..	..	..	..	..	..	..	..	..
13	Helmsdale	..	..	..	..	..	..	9	210	26
14	Lybster	..	..	..	..	..	..	..	..	..
15	Wick	..	..	..	..	..	..	50	1,143	449
	East Coast Totals carried down	304	17,172	2,915	1,271,980	43,170	1,315,150	953	26,438	7,156
	Orkney and Shetland.									
16	Orkney	..	..	..	..	..	..	..	..	..
17	Shetland	..	..	..	..	..	..	385	13,446	3,846
	Orkney and Shetland Totals carried down	..	..	..	..	..	..	385	13,446	3,846
	WEST COAST.									
18	Stornoway	..	..	..	..	..	..	3	111	24
19	Barra	..	..	..	..	..	..	..	..	..
20	Loch Broom	..	..	..	..	..	..	..	..	..
21	Loch Carron and Skye	..	..	..	..	..	..	..	..	..
22	Fort-William	..	..	..	..	..	..	..	..	..
23	Campbeltown	..	..	..	..	..	..	..	..	..
24	Inveraray	..	..	..	..	..	..	..	..	..
25	Rothesay	..	..	..	..	..	..	..	..	..
26	Greenock	16	985	141	70,400	2,000	72,400	..	..	..
27	Ballantrae	..	..	..	..	..	..	..	..	..
	East Coast Totals carried down	16	985	141	70,400	2,000	72,400	3	111	24
	Totals brought down.									
	East Coast	304	17,172	2,915	1,271,980	43,170	1,315,150	953	26,438	7,156
	Orkney and Shetland	..	..	..	..	..	..	385	13,446	3,846
	West Coast	16	985	141	70,400	2,000	72,400	3	111	24
	Grand Totals for 1913.	320	18,157	3,056	1,342,380	45,170	1,387,550	1341	39,995	11,026
	Grand Totals for 1912.	322	17,519	3,081	1,310,390	45,460	1,355,850	1232	36,158	10,322
	Increase in 1913	..	638	..	31,990	..	31,700	109	3,837	704
	Decrease in 1913	2	..	25	..	290	..	..	..	..

No. I.—*continued.*

and Value of Steam Fishing Vessels engaged in the Scottish Fishing Industry ; the Number and the Value of Fishing Gear.

FISHING VESSELS.			TOTALS OF STEAM FISHING VESSELS.						
Value of Vessels.	Value of Fishing Gear.	Total Value.	Number.	Tonnage.	Men Engaged.	Value of Vessels.	Value of Fishing Gear.	Grand Total Value.	No.
£	£	£				£	£	£	
16,450	4,873	21,323	10	282	73	16,450	4,873	21,323	1
22,400	4,090	26,490	61	2,522	551	228,830	11,740	240,570	2
118,470	27,409	145,879	64	1,380	492	118,470	27,409	145,879	3
19,600	5,130	24,730	18	641	153	41,850	6,480	48,330	4
..	..	..	..	..	..	..	..	..	5
150,980	29,982	180,962	304	16,502	2,923	1,162,880	63,022	1,225,902	6
407,300	73,404	480,704	164	4,622	1,232	436,700	74,384	511,084	7
208,200	32,670	240,870	86	2,493	531	210,200	32,820	243,020	8
195,300	20,485	215,785	93	2,815	644	195,300	20,485	215,785	9
662,400	104,080	766,480	276	7,270	2,012	662,400	104,080	766,480	10
298,900	48,040	346,940	122	3,730	985	298,900	48,040	346,940	11
..	..	..	..	..	..	..	..	..	12
11,340	3,654	14,994	9	210	26	11,340	3,654	14,994	13
..	..	..	..	..	..	..	..	..	14
99,440	16,077	115,517	50	1,143	449	99,440	16,077	115,517	15
2,210,780	369,894	2,580,674	1,257	43,610	10,071	3,482,760	413,064	3,895,824	
..	..	..	..	..	..	..	..	..	16
843,000	125,493	968,493	385	13,446	3,846	843,000	125,493	968,493	17
843,000	125,493	968,493	385	13,446	3,846	843,000	125,493	968,493	
3,000	738	3,738	3	111	24	3,000	738	3,738	18
..	..	..	..	..	..	..	..	..	19
..	..	..	..	..	..	..	..	..	20
..	..	..	..	..	..	..	..	..	21
..	..	..	..	..	..	..	..	..	22
..	..	..	..	..	..	..	..	..	23
..	..	..	..	..	..	..	..	..	24
..	..	..	..	..	..	..	..	..	25
..	..	..	16	985	141	70,400	2,000	72,400	26
..	..	..	..	..	..	..	..	..	27
3,000	738	3,738	19	1,096	165	73,400	2,738	76,138	
2,210,780	369,894	2,580,674	1,257	43,610	10,071	3,482,760	413,064	3,895,824	
843,000	125,493	968,493	385	13,446	3,846	843,000	125,493	968,493	
3,000	738	3,738	19	1,096	165	73,400	2,738	76,138	
3,056,780	496,125	3,552,905	1,661	58,152	14,082	4,399,160	541,295	4,940,455	
2,841,740	448,443	3,290,183	1,554	53,677	13,403	4,152,130	493,903	4,646,033	
215,040	47,682	262,722	107	4,475	679	247,030	47,392	294,422	
..	..	..	..	..	..	..	..	..	

APPENDIX A.—

MEANS OF CAPTURE.—RETURN for the Year 1913, showing the Total Number, Scottish Fishing Industry; the Total Number of Persons employed

No.	DISTRICTS.	FISHING BOATS AND BEAM AND OTTER				
		Number.	Tonnage.	Value.		
				Boats and Vessels.	Fishing Gear.	Total.
	EAST COAST.			£	£	£
1	Eyemouth . . .	143	2,831	56,184	30,372	86,556
2	Leith	390	6,714	265,450	48,696	314,146
3	Anstruther . . .	464	9,940	177,415	79,835	257,250
4	Montrose . . .	352	4,295	65,918	26,374	92,292
5	Stonehaven . . .	76	770	3,250	5,070	8,320
6	Aberdeen . . .	380	16,905	1,164,513	65,701	1,230,214
7	Peterhead . . .	351	6,707	454,911	93,946	548,857
8	Fraserburgh . .	593	11,194	282,124	102,732	384,856
9	Banff	399	7,507	223,760	46,637	270,397
10	Buckie. . . .	698	18,753	770,675	166,094	936,769
11	Findhorn . . .	301	7,563	330,015	80,582	410,597
12	Cromarty . . .	145	1,244	7,788	8,324	16,112
13	Helmsdale . . .	121	818	15,111	9,384	24,495
14	Lybster . . .	39	249	677	1,122	1,799
15	Wick	378	4,264	119,290	34,558	153,848
	East Coast Totals carried down . . .	4,830	99,754	3,937,081	799,427	4,736,508
	Orkney and Shetland.					
16	Orkney . . .	338	2,154	8,350	7,745	16,095
17	Shetland . . .	952	20,474	883,812	162,027	1,045,839
	Orkney and Shetland Totals carried down .	1,290	22,628	892,162	169,772	1,061,934
	WEST COAST.					
18	Stornoway . . .	538	4,396	24,545	20,769	45,314
19	Barra	303	1,791	6,868	8,834	15,702
20	Loch Broom . .	332	1,324	8,060	13,111	21,171
21	Loch Carron and Skye .	410	1,501	8,285	8,963	17,248
22	Fort-William . .	216	559	4,207	3,078	7,285
23	Campbeltown . .	276	1,239	12,975	7,795	20,770
24	Inveraray . . .	213	1,049	8,854	3,936	12,790
25	Rothesay . . .	96	265	2,544	1,478	4,022
26	Greenock . . .	138	1,268	72,633	3,221	75,854
27	Ballantrae . . .	349	1,131	10,039	7,315	17,354
	West Coast Totals carried down . . .	2,871	14,52	159,010	78,500	237,510
	Totals brought down.					
	East Coast . . .	4,830	99,754	3,937,081	799,427	4,736,508
	Orkney and Shetland .	1,290	22,628	892,162	169,772	1,061,934
	West Coast . . .	2,871	14,523	159,010	78,500	237,510
	Grand Totals for 1913 .	8,991	136,905	4,988,253	1,047,699	6,035,952
	Grand Totals for 1912 .	9,290	136,590	4,756,844	1,020,258	5,777,102
	Increase in 1913 . .	..	315	231,409	27,441	258,850
	Decrease in 1913 . .	299	..	..	..	..

No. I.—*continued.*

Tonnage, and Value of the Steam, Motor, and Sailing Boats and Vessels engaged in the thereon; and the Total Extent and Value of Fishing Gear.

TRAWL VESSELS (Propelled by Steam, Sails, or Oars).						DISTRICTS.	No.
Area of Nets.	Length of Lines (including Buoy Ropes, etc.).	Crab and Lobster Creels.	Number of Fishermen and Boys.				
			Resident.	Non-Resident.	Total.		
						EAST COAST.	
Sq. Yds.	Yards.	No.					
6,156,000	1,216,410	2,950	561	..	561	Eyemouth.	1
7,557,380	3,143,240	6,335	2,104	..	2,104	Leith.	2
19,136,840	4,841,110	4,340	1,386	368	1,754	Anstruther.	3
4,204,864	3,558,168	4,270	920	..	920	Montrose.	4
722,880	936,120	1,680	189	..	189	Stonehaven.	5
4,998,000	4,391,770	400	3,083	..	3,083	Aberdeen.	6
17,166,000	5,302,960	870	1,225	631	1,856	Peterhead.	7
22,854,240	3,313,980	3,240	1,963	66	2,029	Fraserburgh.	8
10,610,760	3,151,608	1,057	1,440	4	1,444	Banff.	9
39,220,800	6,178,080	530	3,014	231	3,245	Buckie.	10
20,385,800	2,364,540	240	1,630	120	1,750	Findhorn.	11
1,698,520	725,050	340	619	..	619	Cromarty.	12
1,794,200	1,192,920	780	365	..	365	Helmsdale.	13
300,300	130,010	110	137	..	137	Lybster.	14
8,115,440	1,047,580	5,952	1,097	354	1,451	Wick.	15
164,922,024	41,493,546	33,094	19,733	1,774	21,507	East Coast Totals carried down.	
						Orkney and Shetland.	
1,533,000	485,780	11,050	915	..	915	Orkney.	16
29,208,000	5,784,740	220	2,431	3,810	6,241	Shetland.	17
30,741,000	6,270,520	11,270	3,346	3,810	7,156	Orkney and Shetland Totals carried down.	
						WEST COAST.	
4,581,000	4,092,632	7,836	4,066	..	4,066	Stornoway.	18
1,838,400	662,474	5,520	998	..	998	Barra.	19
3,372,500	822,950	4,800	993	..	993	Loch Broom.	20
2,224,600	840,220	4,890	939	..	939	Loch Carron and Skye.	21
613,160	310,910	2,810	463	..	463	Fort-William.	22
1,580,400	511,680	3,260	685	..	685	Campbeltown.	23
811,700	189,198	1,280	449	..	449	Inveraray.	24
442,500	128,060	320	124	..	124	Rothesay.	25
270,710	168,360	1,010	301		301	Greenock.	26
1,457,830	1,038,858	2,060	581	..	581	Ballantrae.	27
17,192,800	8,765,342	33,786	9,599	..	9,599	West Coast Totals carried down.	
						Totals brought down.	
164,922,024	41,493,546	33,094	19,733	1,774	21,507	East Coast.	
30,741,000	6,270,520	11,270	3,346	3,810	7,156	Orkney and Shetland.	
17,192,800	8,765,342	33,786	9,599	..	9,599	West Coast.	
212,855,824	56,529,408	78,150	32,678	5,584	38,262	Grand Totals for 1913.	
207,954,566	58,437,558	79,414	33,135	5,299	38,434	Grand Totals for 1912.	
4,901,258	..	..	..	285	..	Increase in 1913.	
..	1 908,150	1,264	457	..	172	Decrease in 1913.	

APPENDIX A.—

RETURN giving Particulars regarding the State of the Fisheries at each

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class.		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Eyemouth District.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
North Shields (Northumberland)	†103	3,794	.	.	14	54	3	5	120	3,853	4	260	.	.	.	756	.
Cullercoats ,,	.	.	.	.	55	196	6	15	61	211	.	.	2	7	.	85	.
Blyth ,,	‡10	634	1	20	5	14	.	.	16	668	.	.	17	1,419	1	14	.
Newbiggin ,,	6	275	.	.	60	149	14	30	80	454	.	.	3	120	2	51	.
Cresswell ,,	.	.	.	.	1	1	2	2	3	3	.	.	.	.	1	9	.
Hauxley ,,	.	.	.	.	4	11	6	16	10	27	.	.	.	.	3	18	.
Amble ,,	.	.	.	.	5	14	.	.	5	14	.	.	.	.	.	8	.
Alnmouth ,,	.	.	.	.	1	2	4	8	5	10	.	.	.	.	.	6	.
Boulmer ,,	.	.	.	.	16	43	4	8	20	51	1	2	.	.	.	24	.
Craster ,,	.	.	2	50	17	42	.	.	19	92	2	.	.	30	.	27	.
Newton ,,	.	.	.	.	10	24	7	13	17	37	.	.	2	6	.	25	.
Beadnell ,,	4	123	2	58	20	62	7	8	33	251	1	2	.	.	3	41	.
North Sunderland ,,	8	277	.	.	21	60	1	2	30	339	3	3	.	.	.	65	.
Holy Island ,,	1	43	.	.	11	36	.	.	12	79	.	.	.	.	.	36	.
Spittal ,,	1	47	.	.	6	27	1	3	8	77	.	.	1	4	1	21	.
Berwick ,,	5	247	.	.	12	56	3	6	20	309	3	103	.	.	.	32	.
English Stations—Totals .	138	5,440	5	128	258	791	58	116	459	6,475	14	370	25	1,586	11	1,218	.
Burnmouth (Berwickshire) . .	9	265	4	21	26	57	7	7	46	350	1	.	.	1	1	102	.
Eyemouth ,,	56	1,774	4	47	8	40	.	.	68	1,861	1	.	.	32	2	364	.
St. Abbs ,,	17	559	1	8	11	53	.	.	29	620	.	.	3	72	.	95	.
Scottish Stations—Totals .	82	2,598	9	76	45	150	7	7	143	2,831	2	.	3	105	3	561	.
English Stations—Totals .	138	5,440	5	128	258	791	58	116	459	6,475	14	370	25	1,586	11	1,218	.
Grand Totals for District .	220	8,038	14	204	303	941	65	123	602	9,306	16	370	28	1,691	14	1,779	.

* Persons from inland centres temporarily engaged in fishing.
† Includes 72 steam trawlers, of an aggregate tonnage of 3015 tons.
‡ Steam trawlers.

No. II.

Fishing Creek or Station on the Scottish Coasts during the Year 1913.

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal Kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Trawl and drift nets and lines.	The North Sea and West of Scotland.	.	.	.	Herrings, haddocks, cod, plaice, and lemon soles.	31	A record season for herrings. Catch, 133,553 crans, of which 16,427 were landed by trawlers. Additional curing stations being made. Decrease in trawl fish.
Lines and creels.	Inshore.	.	.	.	Haddocks and codlings.	.	Line and crab fishing below average.
Nets and lines.	10 to 50 miles offshore.	.	.	.	Herrings, haddocks, and codlings.	24	A large increase in herrings. A record catch of 50,790 crans. Owing to financial difficulties, the trawlers were either sold or transferred to other ports. Line fishing under average.
Nets, lines, and creels.	1 to 30 miles offshore	.	.	.	Codlings, haddocks, and crabs.	.	Four crews prosecuted the herring fishing at other ports. Line and crab fishing below the average.
Lines and creels	Inshore.	.	.	.	Codlings and crabs.	.	Line and crab fishing below the average.
,,	,,	.	.	.	,,	.	,, ,, ,,
,,	,,	.	.	.	,,	.	,, ,, ,,
,,	,,	.	.	.	,,	.	,, ,, ,,
,,	,,	.	.	.	,,	.	,, ,, ,,
Nets, lines, and creels.	1 to 20 miles offshore.	.	.	.	Herrings, codlings, and crabs.	3	Slight increase in herrings. Line and crab fishing below the average. Considerable trade in shipping stones.
Lines and creels.	Inshore.	.	.	.	Codlings and crabs.	.	Line and crab fishing below the average.
Nets, lines, and creels.	2 to 35 miles offshore.	.	.	.	Herrings, codlings, haddocks and crabs.	1	Of no importance now as a herring station. Line and crab fishing below the average.
,,	,,	.	.	.	,,	10	Slight increase in herrings. Catch, 9,554 crans. Not likely to regain its former position as a herring centre. Line and crab fishing below the average.
,,	,,	.	.	.	Codlings, haddocks, and crabs.	.	Line and crab fishing below the average.
,,	3 to 50 miles offshore.	.	.	.	Herrings, codlings, haddocks, and crabs.	5	Slight increase in herrings. Additional quay space for herring boats in course of construction. Line and crab fishing below the average.
,,	,,	.	.	.	,,	8	,, ,, ,,
		.	.	.		82	
Nets, lines, and creels.	1 to 5 and 12 to 40 miles offshore.	5,408	3,153	1,124	Herrings, haddocks, codlings, and crabs.	1	Small herring station. Of the eight crews only two prosecuted the English herring fishing. Slight decrease in the line and crab fishing.
Net and lines.	,,	120,128	45,612	.	Herrings, mackerel, codlings, and haddocks.	22	Summer herring fishing exhibits large increase in value; quantity slightly above last year. 39 crews had good success at the English autumn fishing. Decrease in small line fishing.
Nets, lines, and creels.	,,	343	160	940	Codlings, and crabs.	.	Has a fleet of 13 motor boats. Fishermen prosecute the home, Irish, and English herring fishings. Line and crab fishing about the average.
		125,879	48,925	2,064		23	
		.	.	.		82	
		.	.	.		105	

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class.		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Leith District.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
Cove (Berwickshire) . . .	1	34	.	.	11	28	.	.	12	62	.	.	3	9	.	20	.
Dunbar (Haddingtonshire) .	2	59	.	.	23	66	.	.	25	125	.	.	1	35	.	125	.
North Berwick ,, .	.	.	.	.	6	12	.	.	6	12	.	.	2	5	.	15	.
Port Seton and Cockenzie (Haddingtonshire)	62	2,147	23	230	26	113	.	.	111	2,490	.	.	13	226	5	655	.
Prestonpans ,,	2	91	.	.	.	.	2	2	4	93	.	.	.	.	.	20	.
Fisherrow (Midlothian) . .	13	422	14	160	9	33	.	.	36	615	.	.	2	5	3	247	.
Leith ,, . .	†5	268	.	.	.	.	1	1	6	269	.	.	1	28	.	48	.
Newhaven ,, . .	.	.	1	11	48	196	1	1	50	208	3	20	.	.	.	312	.
Granton ,, . .	‡47	2,050	.	.	.	.	.	.	47	2,050	.	.	6	162	.	461	.
Bo'ness (Linlithgowshire) .	4	120	1	27	.	.	.	.	5	147	.	.	6	91	.	20	.
Alloa (Clackmannanshire)	2	64	11	229	.	.	5	9	18	302	2	.	.	12	.	30	.
Kincardine (Fifeshire) . .	3	69	4	73	.	.	.	.	7	142	1	34	.	.	.	25	.
Limekilns ,, . .	.	.	.	.	.	.	4	6	4	6	.	.	.	.	.	6	.
Inverkeithing ,, . .	.	.	.	.	.	.	2	5	2	5	.	.	.	.	.	5	.
Aberdour ,, . .	.	.	.	.	3	10	1	1	4	11	1	1	.	.	.	10	.
Burntisland ,, . .	.	.	.	.	.	.	4	8	4	8	1	3	.	.	.	15	.
Kinghorn ,, . .	.	.	.	.	.	.	8	10	8	10	.	.	2	1	.	20	.
Kirkcaldy ,, . .	.	.	.	.	10	22	13	12	23	34	.	.	3	3	.	40	.
Dysart and Wemyss (Fifeshire)	.	.	.	.	.	.	14	15	14	15	.	.	3	2	.	30	.
Totals . .	141	5,324	54	730	136	480	55	70	386	6,604	8	58	42	579	8	2,104	.

* Persons from inland centres temporarily engaged in fishing.
† Steam trawlers.
‡ Includes 42 steam trawlers of an aggregate tonnage of 1782 tons.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal Kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Crab creels.	1 to 10 miles offshore.	97	24	1,154	Crabs.	.	Crab fishing is almost the sole source of income. Returns show an increase of nearly £300.
Creels, lines, and nets.	,,	2,626	1,676	1,865	Crabs, codlings, and haddocks.	1	The principal earnings are from crabs and lobsters. The other fisheries are not now of much importance.
Lines and creels.	,,	948	634	502	Codlings, haddocks, and shell-fish.	.	Only a few crews are employed at fishing, and the catches are usually small, but comparatively, this was one of their most successful years.
Nets, lines, and dredges.	Firth of Forth and off the May Island.	14,010	11,072	1,021	Codlings, haddocks, plaice, and clams.	.	These villages have an industrious population of fishermen, who engage in the herring fishings at the principal Scottish and English centres. They were very successful this year. The home fisheries were actively carried on in spring and winter, and were rather more productive than usual. Motors have been put into many of the large and small boats.
Lines.	1 to 5 miles offshore.	111	98	14	.	.	Fishings unimportant.
Lines and nets.	,,	1,311	819	.	.	.	Principal income obtained from the herring fishing at the Scottish and English centres.
Mussel dredges.	Foreshores.	.	.	214	.	4	Small quantities of mussels and clams landed here.
Trawl, drift, seine, and other nets, also lines.	In the Firth of Forth.	12,346	7,709	177	.	1	Fishing for herrings in the Firth of Forth is the principal pursuit. The catch was greater this year than last. The herrings realised higher prices than ever before, and the earnings in this branch totalled about £4000. The line fisheries were not productive, and the sprat fishing again failed.
Otter trawls.	All through the North Sea.	307,947	190,820	211	Haddocks, codlings, whitings, soles, plaice, etc.	.	Trawling centre. Fleet decreased by 9 vessels. Aggregate catch less by 12,303 cwts.; but earnings greater by £12,299. The industry is going on prosperously, and several additions were being made to the fleet at the close of the year.
Bag-nets.	Upper reaches of Firth of Forth.	487	141	.	Sprats, and sparlings.	.	Bag-net fishing for sprats and sparlings chiefly. Sprat fishing again a failure.
,,	,,	1,894	1,292	.	,,	.	,, ,, ,,
,,	,,	1,720	690	.	,,	.	,, ,, ,,
Lines.	Foreshores.	79	35	4	Codlings.	.	Fisheries unimportant.
Gathering whelks.	,,	.	.	48	Whelks.	.	,, ,,
Nets.	,,	501	227	.	Herrings.	.	,, ,,
Lines and nets.	,,	421	245	6	Codlings.	.	,, ,,
,,	,,	694	406	.	Codlings and herrings.	.	,, ,,
,,	,,	419	204	.	,,	.	,, ,,
,,	,,	761	457	73	Codlings and plaice.	.	,, ,,
		346,372	216,549	5,289		6	

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class.		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Anstruther District.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
Buckhaven (Fifeshire)	9	289	.	.	22	68	14	21	45	378	.	.	7	156	10	48	.
Methil and Leven ,,	.	.	.	.	.	.	1	2	1	2	.	.	.	.	.	2	.
Largo ,,	.	.	.	.	9	29	6	11	15	40	.	.	.	.	.	36	.
Elie and Earlsferry ,,	.	.	.	.	2	10	2	3	4	13	.	.	.	.	.	5	.
St. Monans ,,	104	4,236	18	206	3	9	1	1	126	4,452	.	129	3	.	2	398	140
Pittenweem ,,	43	1,587	1	6	27	118	2	2	73	1,713	1	114	.	.	.	242	54
Anstruther and Cellardyke (Fifeshire)	83	2,587	11	108	7	12	5	8	106	2,715	.	.	12	418	1	480	170
Crail ,,	.	.	.	.	25	65	7	9	32	74	.	.	.	11	.	56	.
Kingsbarns ,,	.	.	.	.	.	.	3	5	3	5	.	.	.	.	.	5	.
St. Andrews ,,	4	139	5	50	23	112	2	2	34	303	.	.	5	30	4	68	4
River Eden ,,	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	8	.
Tayport ,,	.	.	.	.	11	24	3	5	14	29	.	.	1	18	3	18	.
Newburgh ,,	.	.	8	151	.	.	.	.	8	151	.	.	.	.	.	20	.
Totals	243	8,838	43	521	129	447	46	69	461	9,875	1	243	28	633	20	1,386	368
Montrose District.																	
Dundee (Forfarshire)	†10	390	9	150	.	.	.	.	19	540	1	2	.	.	3	96	.
Broughty Ferry (Forfarshire)	1	41	11	129	17	49	8	23	37	242	.	.	5	48	2	90	.
Westhaven ,,	.	.	.	.	.	.	2	1	2	1	.	.	1	4	.	7	.
Easthaven ,,	.	.	.	.	1	2	6	10	7	12	.	.	1	1	.	6	.
Arbroath ,,	18	739	18	239	33	122	1	2	70	1,102	.	35	.	.	2	178	.
Auchmithie ,,	1	47	.	.	9	22	5	7	15	76	.	.	.	.	1	20	.
Usan ,,	.	.	.	.	1	2	5	7	6	9	.	.	.	.	.	8	.
Ferryden ,,	21	761	15	158	3	6	22	29	61	954	.	.	3	111	4	196	.

* Persons from inland centres temporarily engaged in fishing.
† Includes 9 steam trawlers, of an aggregate tonnage of 380 tons.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal Kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Nets and lines.	Firth of Forth.	1,299	1,012	.	Haddock, codling, and herring.	.	Continues to decline as a fishing station. Catch of all kinds of fish shows a falling off. Only four large boats fitted out for herring fishing.
Lines and creels.	,,	158	83	9	Codling and plaice.	.	Slight increase in catch. Very little fishing carried on.
Nets and lines.	,,	2,782	1,894	.	Codling, haddock, plaice, and herring.	.	Decrease in total catch. Increase in herrings and plaice, but a considerable falling off in haddocks and codlings.
,,	,,	392	224	4	Herrings.	.	Increase in catch, principally in herrings.
,,	Firth of Forth and North Sea generally.	13,383	6,081	60	Herrings and cod.	7	Large falling off in catch, chiefly in herrings. Winter herring catch little more than half that of 1912. Two steam drifters added to the fleet, and a number of sail boats fitted with motor power.
,,	,,	8,696	5,628		Herrings, codling, and haddock.	2	A number of small boats fitted with motors for the prosecution of small-line fishing. Substantial increase in line fish, decrease in herrings.
Nets, lines, and creels.	,,	40,427	16,032	164	Herrings and cod.	27	Considerable falling off in catch, principally in herrings, owing to less successful winter herring fishing. Prices higher, and value of catch only slightly less than in 1912.
,,	Along the coast to 10 miles off.	5,299	2,262	2,181	Herrings, codlings, crabs, and lobsters.	.	Increase in herrings, decrease in codlings and haddocks. Lobster fishing received more attention, and the catch shows a considerable increase. One small boat fitted with motor.
Creels.	Along the coast.	6	2	535	Crabs and lobsters.	.	Lobster and crab fishing only carried on. Slight increase in catch.
Nets and lines.	St. Andrews Bay to Bell Rock.	2,240	1,500	116	Plaice and codling.	.	Large falling off in catch. The codling and plaice net fishings were unsuccessful. Gradually getting less important as a fishing station.
Mussel-gathering.	River Eden.	.	.	761	Mussels.	.	Increase in quantity of mussels dispatched.
Mussel-dredging.	Estuary of Tay.	58	15	27	Mussels.	.	Decrease. Most of the mussels dredged by the Tayport fishermen are landed at Broughty Ferry.
Bag nets.	River Tay.	1,046	371	.	Sparlings and flounders.	.	Catch about the same as last year.
		75,786	35,104	3,857		36	
(1) Trawling. (2) Bag nets.	(1) 5 to 100 miles off. (2) River Tay.	54,659	38,193	4	Codlings, haddocks, whitings, and flat fish.	.	Quantity of trawled fish landed about the same as in 1912, but value higher. Sprat fishing again a failure.
Nets and lines.	Tay and adjacent bays.	601	384	1,008	Flat fish and mussels.	.	Decrease in quantity and value of all kinds of fish.
Lines and creels.	Along coast.	108	36	29	Codlings and crabs	.	Only crab and lobster fishing carried on in a small way.
,,	,,	38	17	59	Lobsters and crabs.	.	,, ,, ,, ,,
Nets, lines, and creels.	1 to 80 miles off.	10,076	7,456	422	Herrings, codlings, haddocks, lobsters, and crabs.	1	Large decrease in returns, mainly due to failure of herring fishing.
Lines and creels.	Along coast.	900	552	324	Codlings, lobsters, and crabs.	.	Decrease in returns of fish landed.
,,	,,	223	140	143	,,	.	Returns less than those of 1912.
(1) Nets and lines. (2) Mussel-dredging.	(1) 1 to 80 miles off. (2) South Esk.	.	.	225	Mussels and periwinkles.	.	Big decrease in mussels.

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class.		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Montrose District—contd.	No	Ton.	No.	Ton.	No	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
Montrose (Forfarshire) . .	6	182	.	.	.	.	6	12	12	194	.	.	1	6	1	68	.
Milton (Kincardineshire) . .	.	.	.	.	1	1	2	3	3	4	.	.	.	.	.	6	.
Johnshaven ,, . .	4	135	8	97	28	94	12	19	52	345	.	.	2	16	2	80	.
Gourdon ,, . .	14	519	21	186	32	109	1	2	68	816	.	41	1	.	2	165	.
Total . .	75	2,814	82	959	125	407	70	115	352	4,295	1	78	14	186	17	920	.
Stonehaven District.																	
Shieldhill (Kincardineshire) .	.	.	.	.	1	2	4	5	5	7	.	.	.	.	.	6	.
Catterline ,, . .	.	.	1	5	3	7	10	16	14	28	.	.	2	3	.	24	.
Crawton ,, . .	.	.	.	.	.	.	.	.	.	.	.	.	5	9	.	.	.
Stonehaven ,, . .	13	436	20	231	10	26	7	9	50	702	1	12	.	.	.	148	.
Cowie ,, . .	1	20	.	.	1	4	1	1	3	25	.	.	.	.	.	6	.
Skateraw ,, . .	.	.	.	.	2	5	2	3	4	8	.	.	1	28	.	5	.
Totals . .	14	456	21	236	17	44	24	34	76	770	1	12	8	40	.	189	.
Aberdeen District.																	
Downies (Kincardineshire) .	.	.	.	.	4	18	.	.	4	18	.	.	1	5	.	16	.
Portlethen ,, .	1	32	2	18	5	14	3	7	11	71	.	.	1	4	.	24	.
Cove ,, .	.	.	.	.	8	14	3	5	11	19	2	5	.	.	.	20	.
Aberdeen (Aberdeenshire) .	†288	15,673	2	27	16	46	27	30	333	15,776	.	493	6	.	.	3,023	.
Totals . .	289	15,705	4	45	33	92	33	42	359	15,884	2	498	8	9	.	3,083	.

* Persons from inland centres temporarily engaged in fishing.
† Including 218 trawlers, of an aggregate tonnage of 13,123 tons.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal Kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Mussel dredging.	South Esk.	13,884	7,184	949	Herrings, codlings, haddocks, flat fish, and mussels.	2	Large decrease in quantity and value mainly caused by the failure of the herring fishing.
Lines and creels.	Along coast.	131	68	56	Lobsters and crabs.	.	Creek of little importance.
Nets, lines, and creels.	1 to 60 miles off.	2,014	1,495	449	Codlings, haddocks, lobsters, and crabs.	.	The returns for this creek are less than those of the preceding year.
,,	,,	9,025	6,999	1,010	Codlings, haddocks, whitings, and crabs.	1	Owing to scarcity of round fish a decrease in quantity, but increase in value owing to higher prices realised. Crab fishing very successful.
		91,659	62,524	4,678		4	
Lines and crab creels.	1 to 4 miles offshore.	19	8	246	Codlings, crabs, and lobsters.	.	Decrease in white fish but slight increase in shell-fish.
,,	1 to 10 miles offshore.	470	224	994	Codlings, conger eels, crabs, and lobsters.	.	Great decrease in white fish but slight increase in shell-fish.
Drift nets, Lines, and crab creels.	45 to 80 miles S.E. and 1 to 20 miles off Tod Head.	5,559	3,392	228	Herrings, codlings, haddocks, whitings, and crabs.	5	All kinds except shell-fish show a marked decrease from the previous year's catch.
Lines and crab creels.	1 to 10 miles offshore.	95	54	2	Codlings and crabs.	.	Decrease in both codlings and crabs.
,,	,,	192	83	49	Haddocks, whitings, lobsters, and crabs.		Decrease in white fish but slight increase in shell-fish.
		6,335	3,761	1,519		5	
Lines and creels.	1 to 10 miles offshore.	813	559	23	Haddocks, whitings, codlings, and crabs.		Decrease in quantity and value of white fish, but slight increase in quantity and value of shell-fish.
,,	,,	1,053	748	48	,,		Decrease in quantity and value of white fish, but little change in quantity and value of shell-fish.
,,	,,	319	170	125	Codlings, whitings, saithe, haddocks, and crabs.		Decrease in quantity and value of both white fish and shell-fish.
Otter trawl, drift nets, great, small, and hand lines.	Off Shetland, Orkney, North-western grounds, St. Kilda, Flannan Isles, Barra Head, West coast of Ireland, Faroe, Norwegian coast and Iceland. In the North Sea in latitudes 55° to 61° N.	2,149767	1,305769	19	Cod, haddocks, herrings, ling, saithe, whitings, halibut, lemon soles, plaice, witches, megrims, skate, etc.	Herring curers, 17; Tinners, 7; and Haddock and Cod Curers, 154.	Increase in catch of trawl fish and herrings, but slight decrease in steam great-line and other line fishings. All over there is a substantial increase in quantity and value of fish landed. Prices ruled exceptionally high.
		2,151952	1,307246	215		178	

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class.		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Peterhead District.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
Newburgh (Aberdeenshire)	.	.	.	.	1	5	1	2	2	7	.	.	.	.	.	4	.
Collieston ,,	.	.	.	.	2	4	5	8	7	12	.	.	1	4	.	14	.
Whinnyfold ,,	3	115	.	.	3	6	4	9	10	130	.	33	1	.	.	24	6
Port Erroll ,,	3	109	.	.	4	8	16	22	23	139	.	17	1	.	.	83	6
Bullers O'Buchan ,,	.	.	.	.	1	5	.	.	1	5	.	.	.	.	.	2	.
Boddam ,,	7	276	3	47	4	11	15	21	29	355	.	.	5	86	2	122	12
Peterhead ,,	†155	4,815	.	.	26	88	36	46	217	4,949	10	346	.	.	4	871	284
Buchanhaven ,,	3	130	2	19	9	35	8	11	22	195	.	2	.	.	.	96	8
Rattray ,,	.	.	.	.	.	.	5	5	5	5	.	.	.	.	.	9	.
Totals	171	5,445	5	66	50	162	90	124	316	5,797	10	398	8	90	6	1,225	316
Fraserburgh District.																	
St. Combs (Aberdeenshire)	40	1,559	.	.	.	.	65	92	105	1,651	.	.	.	141	1	265	8
Charlestown ,,	.	.	.	.	.	.	4	8	4	8	.	.	.	.	.	16	.
Inverallochy ,,	31	1,058	.	.	.	.	58	95	89	1,153	9	161	.	.	.	316	12
Cairnbulg ,,	42	1,597	.	.	.	.	69	80	111	1,677	6	.	.	112	.	313	14
Fraserburgh ,,	‡129	4,521	11	146	7	42	43	63	190	4,772	.	206	2	.	.	693	20
Sandhaven and Pitullie (Aberdeenshire)	10	414	1	15	1	9	9	12	21	450	.	6	2	.	1	65	4
Rosehearty ,,	36	1,349	3	18	9	48	9	15	57	1,430	.	.	3	8	.	249	8
Pennan (Banffshire)	1	34	.	.	.	.	15	19	16	53	.	.	1	12	.	46	.
Totals	289	10,532	15	179	17	99	272	384	593	11,194	15	373	8	273	2	1,963	66
Banff District.																	
Crovie (Banffshire)	6	198	.	.	6	25	21	27	33	250	.	.	6	27	.	97	.
Gardenstown ,,	39	1,402	7	121	6	30	14	20	66	1,573	.	.	4	27	.	244	.
Macduff ,,	56	1,951	2	32	20	80	12	25	90	2,088	1	83	.	.	.	371	4
Banff ,,	42	1,369	.	.	.	.	3	4	45	1,373	.	.	2	48	1	277	.
Whitehills ,,	18	692	1	9	43	196	24	48	86	945	.	34	3	.	1	250	.

* Persons from inland centres temporarily engaged in fishing.
† Includes 7 steam trawlers of an aggregate tonnage of 491 tons.
‡ Includes 1 steam trawler of 57 tons.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal Kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Lines.	1 to 2 miles off.	34	13	15	Codlings and mussels.	.	Unimportant as a fishing creek.
,,	1 to 4 miles off.	469	291	,,	Codlings, whitings and flounders.	.	A considerable decrease in quantity and value.
,,	1 to 5 miles off.	193	99	,,	Codlings and haddocks.	.	There is very little change at this creek from year to year.
,,	2 to 6 miles off.	659	460	,,	Codlings, dabs, and haddocks.	.	The results at this creek show very little change.
,,	1 mile off.	47	19	,,	Codlings and saithe.	.	There are no regular fishermen at this creek.
,,	2 to 8 miles off.	705	272	59	Codlings, haddocks, and flounders.	.	A slight decrease in quantity and value.
Nets and lines.	1 to 4, and from 10 to 80 miles off.	803,186	369,865	34	Herrings, cod, codlings, ling, and plaice.	78	Considerable increase in quantity and value, also in means of capture.
Lines.	1 to 3 miles off.	512	275	,,	Codlings and flounders.		A large decrease in quantity and value.
Lines and crab creels.	,,	80	39	40	Codlings and crabs.	.	,, ,, ,,
		805,885	371,333	148		78	
Lines and crab creels.	1 to 10 miles from shore.	3,907	1,243	727	Codlings and crabs.	.	Fishermen belonging to this section had another prosperous year at the various herring fishings.
,,	,,	3,321	979	209	,,	.	An increase of 7 steam drifters. Fishermen belonging to this section also had a very prosperous year.
,,	,,						
Nets and lines.	1 to 90 miles from shore.	672,274	336,054	216	Herring, haddock, and codling.	72	An increase of 11 steam drifters. Fishermen and all others interested in herring curing have had a remarkably prosperous year.
Lines and crab creels.	1 to 10 miles from shore.	111	57	277	Codling and crabs.	.	No improvement at this station, slight decrease in value of boats and gear.
,,	,,	1,237	882	163	,,	3	An increase of 2 steam drifters. Fishermen belonging to this section had a prosperous year.
,,	,,	238	81	38	,,	.	An increase of 1 steam drifter, and a decrease of 1 motor boat at this section.
		681,088	339,296	1,630		75	
Lines.	Moray Firth.	4,409	2,357	59	Cod and haddocks.		Decrease in quantity, chiefly in herrings and haddocks, but increase in value. Two steam drifters added to the fleet.
Nets and lines.	,,					5	
Nets, lines, and crab creels.	,,	24,794	13,399	68	Herrings, cod and haddocks.	9	Decrease in quantity, chiefly in herrings and haddocks, but an increase in value. There was an addition of 5 steam drifters.
,,	,,	2	1	.	.	.	No fishing carried on. Fishermen as usual worked from the large centres. Boat-builders were well employed, and are likely to be very busy for some time.
,,	,,	9,843	7,677	227	Herrings, cod, haddocks, and plaice.	2	Principally a line and cod net fishing station. Considerable decrease in quantity and value, mostly in cod and haddocks.

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Banff District—contd.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
Portsoy (Banffshire)	19	796	2	26	10	43	12	19	43	884	.	.	1	45	.	121	.
Sandend ,,	8	306	.	.	19	70	9	18	36	394	1	.	.	47	.	80	.
Totals	188	6,714	12	188	104	444	95	161	399	7,507	2	117	16	194	.	1,440	4
Buckie District.																	
Cullen (Banffshire)	52	1,996	.	.	10	33	6	6	68	2,035	.	.	1	155	.	254	14
Portknockie ,,	84	3,013	.	.	10	39	7	9	101	3,061	3	194	.	.	.	429	27
Findochty ,,	95	3,410	.	.	11	33	20	34	126	3,477	.	76	.	.	.	492	27
Portessie ,,	60	1,961	1	15	14	47	.	.	75	2,023	.	30	2	.	.	314	26
Buckie ,,	193	5,911	4	56	29	135	8	17	234	6,119	9	.	.	35	.	1,173	110
Portgordon ,,	64	1,938	.	.	26	92	4	8	94	2,038	3	.	.	19	.	352	27
Totals	548	18,229	5	71	100	379	45	74	698	18,753	15	300	3	209	.	3,014	231
Findhorn District.																	
Lossiemouth (Elginshire)	84	2,610	3	51	13	116	6	15	106	2,792	.	.	4	141	1	650	53
Hopeman ,,	46	1,658	.	.	10	64	.	.	56	1,722	.	.	.	28	.	365	18
Burghead ,,	36	1,294	.	.	17	85	4	9	57	1,388	.	.	1	66	.	220	17
Findhorn ,,	.	.	.	.	.	.	1	2	1	2	.	.	1	2	.	4	.
Nairn (Nairn)	40	1,408	.	.	22	103	5	12	67	1,523	.	125	4	.	1	333	31
Campbeltown (Inverness)	.	.	.	.	11	80	.	.	11	80	.	26	.	.	.	48	.
Inverness ,,	1	33	1	19	1	4	.	.	3	56	.	.	.	11	.	10	1
Totals	207	7,003	4	70	74	452	16	38	301	7,563	.	151	10	248	2	1,630	120
Cromarty District.																	
Avoch (Ross-shire)	16	658	.	.	47	295	10	22	73	975	.	.	5	46	1	298	.
Cromarty and Invergordon (Ross-shire)	.	.	.	.	7	21	24	42	31	63	.	.	2	39		128	.
Nigg ,,	.	.	.	.	.	.	5	8	5	8	.	.	.	.	1	10	.

* Persons from inland centres temporarily engaged in fishing.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal Kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Nets and lines.	Moray Firth.	1,138	648	.	Herrings, cod, and haddocks.	2	A decrease in quantity and value, mostly in herrings and haddocks. Two steam drifters added to the fleet.
Lines.	,,	613	384	.	Cod and haddocks.	1	Only line fishing carried on. Decrease in quantity and value.
		40,799	24,466	354		19	
Nets and lines.	Moray Firth.	822	365	.	Cod and haddocks.	1	The majority of the fishermen were employed exclusively at herring fishing for the greater part of the year at the various centres in Scotland, England, and Ireland, and enjoyed a year of exceptional prosperity. Line fishing, which is prosecuted by the older fishermen, was less successful than during the previous year.
,,	,,	2,581	1,576	28	,,	4	
,,	,,	2,943	1,281	7	,,	2	
,,	,,	.	.	.	,,	.	
Cod nets, herring nets, and lines.	,,	49,180	23,021	2	Herring, cod, haddocks, and other kinds of fish.	6	
Nets and lines.	,,	2,517	1,507	35	Codlings.	.	
		58,043	27,750	72		13	
Nets, lines, and creels.	Moray Firth.	30,175	16,771	34	Herrings, cod, and haddocks.	7	Considerable decrease in herrings, cod, and haddocks. Fishermen employed chiefly at herring fishing at the principal stations around the coast.
,,	,,	3,273	1,982	.	Cod and haddocks.	.	
Nets and lines.	,,	4,821	2,667	.	Herrings, cod, and haddocks.	1	
Lines.	,,	207	118	209	Haddocks and mussels.	.	Decrease in white fish and mussels.
Nets and lines.	,,	2,508	2,288	.	Haddocks and plaice.	.	Large decrease in haddocks. Majority of fishermen employed at herring fishing at the principal stations.
,,	,,	751	660	.	Haddocks, flounders, and plaice.	.	
Nets.	Inverness and Beauly Firths.	3,603	1,418	.	Herrings and sprats.	.	Herring and sprat fishing a failure.
		45,338	25,904	243		8	
Drift nets, small lines, and cod nets.	Inverness, Beauly, and Moray Firths.	165	120	78	Codlings and plaice.	.	Majority of fishermen employed almost exclusively at drift-net fishing on the West and East Coasts from May till October, and later in small herring and sprat fishing in the Inverness and Beauly Firths. Produce of the latter fishery landed in Findhorn district.
Small and hand lines, and drift nets.	Cromarty and Dingwall Firths, and 1 to 8 miles off Sutors.	7,692	5,531	320	Codlings, haddocks, and plaice.	1	Line-fishing chiefly. Decrease in haddocks and codlings, owing to scarcity of fish on the grounds, and to the fact that a number of men worked as navvies during the autumn and winter at the Admiralty construction works on the Sutors. Others at herring fishing as hired hands.
,,	Off Sutors.	.	.	.	,,	.	

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class.		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Cromarty District—contd.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
Shandwick (Ross-shire) . .	.	.	.	.	1	3	1	3	2	6	.	.	.	.	.	14	.
Balintore . ,, . . and	.	.	.	.	1	2	4	8	5	10	.	.	2	4	.	38	.
Hilton . ,, . .	.	.	.	.	.	.	14	33	14	33	.	.	3	6	1	76	.
Rockfield . ,, . . and	2	60	.	.	.	.	3	7	5	67	.	.	.	.	1	18	.
Portmahomack ,, . .	.	.	.	.	4	13	2	5	6	18	.	.	.	.	.	18	.
Inver . . ,, . .	1	46	.	.	3	18	.	.	4	64	.	.	.	.	.	19	.
Tain and Tarlogie ,, . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Totals . .	19	764	.	.	63	352	63	128	145	1,244	.	.	12	95	6	619	.
Helmsdale District.																	
Embo (Sutherlandshire) .	6	136	.	.	12	48	2	4	20	188	.	.	2	4	.	130	.
Golspie ,, . .	2	46	.	.	9	44	8	15	19	105	.	.	2	46	1	50	.
Brora ,, . .	1	28	.	.	6	30	6	10	13	68	.	.	1	26	1	44	.
Portgower ,, . .	.	.	.	.	1	5	1	2	2	7	.	.	.	.	.	7	.
Helmsdale ,, . .	10	228	.	.	10	50	28	56	48	334	.	.	.	.	.	106	.
Dunbeath (Caithness-shire) .	2	45	2	30	5	21	10	20	19	116	.	.	1	2	1	28	.
Totals . . .	21	483	2	30	43	198	55	107	121	818	.	.	6	78	3	365	.
Lybster District.																	
Latheronwheel (Caithness-shire)	.	.	1	14	3	18	5	12	9	44	.	.	.	.	.	21	.
Forse ,, .	.	.	.	.	.	.	4	8	4	8	.	.	.	16	.	12	.
Lybster ,, .	1	48	5	68	.	.	9	18	15	134	2	1	.	.	.	68	.
Clyth ,, .	1	43	.	.	.	.	10	20	11	63	.	.	.	2	.	36	.
Total . .	2	91	6	82	3	18	28	58	39	249	2	1	.	18	.	137	.
Wick District.																	
Whaligoe and Sarclet (Caithness-shire)	1	24	.	.	.	.	8	16	9	40	.	.	1	27	.	50	.
Wick ,,	64	2,357	2	21	11	45	9	18	86	2,441	.	48	4	.	.	405	30
Boathaven and Staxigoe ,,	2	93	.	.	1	3	7	14	10	110	.	.	2	30	.	27	.
Ackergill . . ,, .	.	.	.	.	4	11	4	8	8	19	.	.	1	3	.	16	.
Keiss and Nybster ,, .	2	52	.	.	3	10	10	20	15	82	.	1	1	.	.	40	.

* Persons from inland centres temporarily engaged in fishing.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal Kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Small and hand lines.	2 to 12 miles E. by S.	1,954	927	.	Codlings and haddocks.	1	Haddocks and codlings scarcer, with a consequent decline in the total catch. A number of men were absent at herring fishing, and others were employed as navvies during the closing six month of the year.
Lines and crab creels.	Dornoch Firth, and 1 to 15 miles off Tarbat Ness.	2,122	1,008	70	Codlings, haddocks, and plaice.	1	Decrease in haddocks and codlings.
Small lines.	1 to 10 miles E. by N.E. off Inver.	20	15	.	Flounders and plaice.	.	Part of the catch landed at Portmahomack. Majority of men employed at the chief herring fishing centres for a considerable period of the year.
,,	,,	.	.	.	Mussels.	.	Mussels the only fishery product. Output nil during 1913.
		11,953	7,601	468		3	
Lines.	2 to 5 miles off.	1,587	1,134	56	Haddocks and plaice.	.	Falling off in quantity and value. Many of the fishermen were employed during a great part of the year as labourers at the Naval Works, Cromarty.
Lines and cod nets.	,,	3,746	1,498	122	Cod, haddocks, and plaice.	.	Considerable decrease in quantity and value.
Lines.	,,	1,782	671	31	Haddocks and cod.	1	,, ,, ,, ,,
,,	,,	.	.	.	,,	.	Unimportant creek.
Lines and crab creels.	2 to 8 miles off.	5,634	2,376	269	,,	1	Quantity little more than half that of the previous year, and marked decrease in value.
Lines and cod nets.	2 to 5 miles off.	1,957	860	92	,,	.	Little change from 1912. Slight increase in value.
		14,706	6,539	570		2	
Drift nets, lines, and crab creels.	1 to 5 miles off.	539	142	33	Codling, lobsters, and crabs.	.	Slight increase in herrings and crabs, decrease in codlings. Value similar to 1912.
Nets and lines.	Inshore grounds.				Codlings.	.	Herring catch double that of last year. Considerable decrease in codlings and haddocks. Shell-fish slightly increased. Total value much the same as in previous year.
Drift nets, lines, and creels.	1 to 6 miles off.	3,423	1,316	59	Herrings, codlings, and haddocks.	1	
Lines.	1 to 3 miles off.	748	156	28	Codlings.	.	Considerable decrease both in quantity and value.
		4,710	1,614	120		1	
Lines and creels.	1 to 4 miles off.	380	109	81	Cod and crabs.	.	At most of the creeks, unsettled weather for a great part of the year was experienced. There was also a scarcity of fish.
Drift nets, cod nets, and lines.	1 to 4 miles off, and 8 to 42 miles E. by N.S.E. E. by E.	414,472	219,763	.	Herring, mackerel, cod, ling, and saithe.	55	Considerable decrease in herrings and cod, but an increase in value, owing to the high prices paid for herrings.
Drift nets, lines, and creels.	1 to 6 miles off.	611	192	34	Cod, lobsters, and crabs.	.	Decrease of white fish. Shell-fish showed little difference.
,,	Sinclair Bay.	482	194	69	Cod, haddock, lobsters, and crabs.	.	Considerable decrease in white fish and crabs.
,,	Sinclair Bay and along the coast.	1,312	641	1,005	Cod, lobsters, and crabs.	.	In the summer months the fishermen of this creek made a speciality of crab fishing. They had a fairly successful season.

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Wick District—contd.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
Auckengill and Freswick (Caithness shire)	.	.	.	.	.	.	14	28	14	28	.	.	3	6	.	35	.
Stroma ,,	4	145	.	.	4	14	45	90	53	249	4	.	.	11	.	79	.
Duncansbay and Huna ,,	.	.	.	.	1	4	15	30	16	34	.	.	2	2	.	50	.
Gills and Mey ,,	1	42	.	.	.	.	11	24	12	66	1	.	.	1	.	28	.
Scarfskerry and Ham ,,	.	.	.	.	.	.	10	22	10	22	1	2	.	.	.	18	.
Brough and Dunnet ,,	.	.	.	.	.	.	9	20	9	20	.	.	.	.	.	20	.
Castlehill and Murkle ,,	.	.	.	.	.	.	4	8	4	8	.	.	.	.	.	10	.
Thurso and Scrabster ,,	.	.	3	39	7	22	12	24	22	85	3	23	.	.	.	60	.
Crosskirk and Brims ,,	.	.	.	.	1	2	2	5	3	7	.	.	.	.	.	6	.
Sandside ,,	.	.	.	.	1	5	3	7	4	12	1	5	.	.	.	8	.
Portskerra (Sutherlandshire)	.	.	.	.	.	.	12	24	12	24	1	2	.	.	.	45	.
Strathypoint and Armadale (Sutherlandshire)	.	.	.	.	1	3	8	16	9	19	.	.	1	2	.	23	.
Kirtomy and Farr ,,	1	37	.	.	.	.	7	14	8	51	3	41	.	.	.	30	.
Skerray ,,	.	.	.	.	.	.	5	10	5	10	.	.	.	.	.	37	.
Scullomy ,,	.	.	.	.	.	.	1	3	1	3	.	.	1	2	.	6	.
Isle Roan ,,	1	37	.	.	.	.	5	12	6	49	.	.	.	.	.	23	.
Talmine and Portvasgo ,,	.	.	.	.	.	.	8	18	8	18	.	.	.	.	.	45	.
Erriboll and Rispond ,,	.	.	.	.	.	.	18	39	18	39	2	3	.	.	.	36	.
Totals . .	76	2,787	5	60	34	119	227	470	342	3,436	16	125	16	84	.	1,097	30
Orkney Dstrict.																	
North Ronaldshay . . .	.	.	.	.	.	.	13	15	13	15	.	.	3	2	.	26	.
Sanday	.	.	.	.	.	.	24	28	24	28	.	.	6	10	.	48	.
Westray and Papa . . .	1	36	.	.	4	21	38	76	43	133	.	.	.	.	.	144	.
Eday and Pharay . . .	.	.	.	.	.	.	20	25	20	25	.	.	4	5	10	40	.
Stronsay	8	326	.	.	.	.	20	33	28	359	.	.	4	58	1	54	.
Shapinshay	.	.	.	.	.	.	6	9	6	9	.	.	.	.	.	14	.
Rousay, Egilshay, and Viera .	.	.	.	.	.	.	7	9	7	9	.	.	1	1	.	17	.
Evie and Birsay . . .		.	.	.	.	.	10	12	10	12	.	.	2	2	2	24	.

* Persons from inland centres temporarily engaged in fishing.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal Kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Lines and creels.	2 to 7 miles off.	639	166	31	Cod, lobsters, and crabs.	.	At these creeks crofters occasionally prosecute the fishing. The results obtained are somewhat under the previous year's.
Drift nets, lines, and creels.	Around the Pentland Skerries.	4,906	1,171	208	Cod and lobsters.	1	Small motor craft along with the sailers were made use of to advantage at line fishing. Fish less abundant, but, owing to improved craft, catch similar to previous year's.
Hand lines and creels.	In the vicinity of the Pentland Skerries.	457	182	59	,,	.	Slight decrease in value of white and shell-fish.
,,	1 to 6 miles off.	.	.	.	,,	.	About 40 per cent. less cod caught, but an increase in lobsters and crabs.
,,	,,	673	205	362	,,	.	
,,	1 to 4 miles off.	.	.	.	,,	.	
Nets and lines.	Dunnet Bay.	34	17	2	Cod.	.	Few regular fishermen here. As a fishing creek it is unimportant and declining.
Drift nets, lines and creels.	2 to 8 miles off and along the north coast.	26,813	9,453	562	Herrings, cod, ling, lobsters, and crabs.	3	Very substantial increase in the landings, wholly attributable to the successful herring fishing prosecuted on the north coast in January. It is now a number of years since Scrabster harbour was so much frequented by fishing craft.
Lines and creels.	Along the coast.	81	23	228	Cod, lobsters, and crabs.	.	Improved results. Decrease in white fish, but considerable increase in shell-fish.
,,	Sandside Bay and vicinity.	567	146	265	,,	.	Little difference from 1912. Two small motor boats employed at this creek.
Nets, lines, and creels.	Along the coast.	1,493	354	315	Cod, saithe, lobsters, and crabs.	.	Decline of white fish. Shell-fish well maintained. A large number of the fishermen are employed as hired hands on East Coast craft for about six months in the year.
,,	,,						
Lines and creels.	,,	154	31	62	Cod and lobsters.	.	Fishing confined chiefly to the first quarter of the year when fishermen at home. Slight decrease—lobsters.
,,	,,	169	62	135	,,	.	Only lobsters are marketed from here. The few white fish caught are sold locally. Increased catch of lobsters, but other kinds have decreased.
,,	,,				.	.	
Nets, lines, and creels.	Around the island.	242	67	64	Cod, haddock, and lobsters.	.	Most of the fishermen of this island were engaged at the various herring fishing centres for a great part of the year, and consequently did little fishing at home.
Lines and creels.	Along the coast.	553	168	111	,,	.	Little done apart from lobster fishing. Considerable decrease in white fish, but an increase in lobsters.
,,	,,	442	192	423	Cod, haddock, flounder, and and lobsters.	.	Considerable decrease in quantity and value of all classes of white and shell-fish.
		454,480	233,136	4,016		59	
Lines and creels.	Inshore.	2,838	1,552	819	Lobsters.	.	Crofter fishermen; lobster fishing chiefly prosecuted.
Drift nets and creels.	Inshore and 10 to 50 miles S.E. & E.S.E.				Lobsters and herrings.	1	Herrings all landed by East Coast steam drifters.
Lines and creels.	Inshore	699	231	306	Cod and lobsters.	.	Crofter fishermen; chiefly lobster fishing prosecuted.
,,	,,	602	155	282	Lobsters.	.	,, ,, ,, ,,
Nets and creels.	8 to 60 miles E. by S. to S. by E.	275,467	161,810	261	Lobsters and herrings.	18	Principal herring curing station in district, but no attention given to line fishing.
Creels.	Inshore.	40	17	94	Lobsters.	1	White fish all landed by foreign vessels for curing purposes and not included in this return.
Lines and creels.	,,				,,	.	Fisheries unimportant.
,,	,,	336	173	18	Cod and lobsters.	.	,, ,,

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class.		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Orkney District—contd.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
Kirkwall	2	79	3	45	3	13	16	40	24	177	.	.	.	1	.	54	.
Tankerness and Deerness	2	100	.	.	.	.	6	7	8	107	.	.	2	2	2	20	.
Holm	1	34	.	.	2	6	2	4	5	44	1	3	.	.	.	22	.
Burray	15	567	.	.	1	11	5	8	21	586	1	101	.	.	.	105	.
Orphir and Scapa	.	.	.	.	1	17	11	20	12	37	.	.	.	.	.	28	.
Stromness	.	.	.	.	.	.	24	39	24	39	1	.	.	6	2	46	.
Hoy and Gramesay	1	25	.	.	.	.	15	23	16	48	4	7	.	.	4	44	.
Walls	3	110	.	.	.	.	16	20	19	130	.	10	.	.	.	50	.
Flotta	1	26	.	.	1	5	18	26	20	57	4	11	.	.	.	50	.
Phara and Cara	.	.	.	.	1	5	1	2	2	7	.	.	1	17	.	7	.
Swona	.	.	.	.	1	5	1	2	2	7	.	.	3	9	.	6	.
South Ronaldshay	8	266	1	11	3	9	22	39	34	325	2	.	.	14	.	116	.
Totals	42	1,569	4	56	17	92	275	437	338	2,154	13	132	26	127	21	915	.
Shetland District.																	
Fair Isle	.	.	.	.	.	.	6	6	6	6	.	.	.	.	.	24	.
Grutness	7	307	.	.	.	.	9	9	16	316	.	.	.	.	.	55	.
Quendale Bay	6	249	.	.	.	.	5	5	11	254	.	.	.	.	.	50	.
Boddam	.	.	.	.	2	10	3	3	5	13	.	.	.	.	.	40	.
Spiggie	1	36	.	.	.	.	4	4	5	40	.	.	.	.	.	45	.
Levenwick	9	324	.	.	.	.	4	4	13	328	.	.	1	36	.	65	.
Hoswick	16	707	.	.	.	.	6	9	22	716	.	.	1	17	.	94	.
Sandsair	5	194	.	.	.	.	5	5	10	199	.	.	1	40	.	65	.
Aithsvoe	4	127	.	.	.	.	7	7	11	134	.	.	.	.	.	60	.
Bressay	.	.	.	.	.	.	14	14	14	14	.	.	.	.	.	40	.
Lerwick	35	1,270	4	56	23	161	21	21	83	1,508	.	.	2	103	1	430	10
Nesting	1	36	.	.	.	.	4	4	5	40	.	.	.	.	.	28	.
Whalsay	24	848	.	.	2	8	18	18	44	874	.	.	3	20	1	170	.
Skerries	1	22	.	.	2	16	5	5	8	43	.	.	.	.	.	28	.
Vidlin	1	25	.	.	.	.	4	4	5	29	.	.	.	.	.	30	.
Burravoe	1	58	.	.	.	.	3	3	4	61	.	.	.	.	.	24	.
Gossaburgh	.	.	.	.	.	.	3	3	3	3	.	.	.	.	.	15	.
Mid Yell	2	70	.	.	2	8	9	9	13	87	.	.	1	85	.	50	.
Cullivoe and Gutcher	2	83	.	.	.	.	12	12	14	95	.	.	5	59	.	55	.
West Sandwick	.	.	.	.	.	.	6	6	6	6	.	.	.	.	.	24	.
Fetlar	.	.	.	.	.	.	3	3	3	3	.	.	.	.	.	12	.
Westing and Snarravoe	.	.	.	.	.	.	8	8	8	8	.	.	.	.	.	30	.
Uyasound	1	25	.	.	.	.	4	4	5	29	.	.	.	.	.	30	.
Muness and Colvidale	.	.	.	.	.	.	3	3	3	3	.	.	.	.	.	9	.
Baltasound	8	337	.	.	.	.	3	3	11	340	.	.	2	43	.	42	.
Haroldswick	.	.	.	.	.	.	7	7	7	7	.	.	1	1	.	28	.
Norwick	.	.	.	.	.	.	7	7	7	7	.	.	1	1	.	28	.
Burrafirth	.	.	.	.	.	.	5	5	5	5	.	.	1	1	.	16	.

* Persons from inland centres temporarily engaged in fishing.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal Kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Lines.	Stronsay Firth and inshore.	22,707	10,992	2,547	Herrings and cod.	8	Local fishermen employed at line fishing throughout the year. Considerable quantities of cod landed by trawlers and Faroe smacks for curing purposes. Herrings all landed by stranger fishermen.
Nets and creels.	10 to 40 miles S.E. and inshore.	134	54	201	Lobsters.	.	Crofting districts. Fishermen prosecute herring fishing at other creeks.
,,	,,	15,259	8,252	136	Herrings.	4	Landings practically confined to herrings landed by stranger boats.
Nets and lines.	,,	12,435	6,934	,,	,,	4	Crofter fishermen. Fifteen local crews prosecuted the herring fishing with good results.
Lines and creels.	Inshore.	583	194	245	Cod and lobsters.	.	General results about same as last year.
Nets, lines, and creels.	,,	6,365	1,366	1,193	Lobsters and herrings.	2	Local fishermen engaged in line and lobster fishing. Herrings all landed by stranger crews.
,,	,,	316	92	593	Lobsters and cod.	.	Crofter fishermen; lobster and hand-line fishing prosecuted with fair success. Herring fishing prosecuted from other creeks with satisfactory results.
,,	,,	752	205	54	,,	.	
,,	,,				,,	.	
,,	,,	1,661	616	215	,,	.	
,,	,,				,,	.	
,,	,,				,,	.	
		340,194	192,643	6,964		38	
Lines.	Close inshore.	4,877	2,097	.	Principally herrings and great-line fish.	1	Considerable decrease in quantity and value of herrings; otherwise general results about same as in 1912.
Nets and Lines.	1 to 60 miles off.					2	
,,	,,					.	
,,	,,					2	
,,	,,					.	
,,	,,	54,145	27,872	.	,,	2	Decrease in quantity and value of herrings; other branches about same as last year.
,,	,,					9	
,,	,,	853	158	.	Chiefly hand- and small-line fish.	.	Slight increase in quantity and value of hand-line fish. Fishermen land their herrings at Hoswick.
,,	,,					.	
,,	1 to 90 miles off.	623019	282,624	250	General—herrings, mackerel, great-line fish and haddocks.	8	Decrease of nearly 50 per cent. in quantity and 40 per cent. in value of herrings; decrease of nearly 50 per cent. in quantity and value of haddocks; slight decrease in quantity and value of great-line fish.
,,	,,					42	
,,	1 to 40 miles off.					.	
,,	,,	21,302	10,845	2	Herrings, haddocks, and great-line fish.	2	Increase of 30 per cent. in quantity and over 100 per cent. in value of herrings; general results of line fishing about same as last year.
,,	,,					1	
,,	,,					1	
Nets and lines.	1 to 40 miles off.	.	.	.	Line fish, principally saithe and haddocks.	1	General decrease in quantity and value of line fish. Fishermen landed their herrings at other stations in the district.
Lines.	Inshore.	.	.	.		.	
Nets and lines.	,,	888	154	1		1	
,,	,,	.	.	.		1	
Lines.	,,	.	.	.		.	
,,	,,	.	.	.		.	
,,	,,	.	.	.		.	
Nets and lines.	1 to 40 miles off.	1,978	632	.	Principally herrings; also saithe, cod, and haddocks.	1	Decrease in quantity and value of herrings; results of line fishings about same as in 1912.
Lines.	Inshore.	.	.	.		1	
Nets and lines.	1 to 60 miles off.	.	.	.	Herrings, great-line fish, and haddocks.	7	Decrease of about 50 per cent. in quantity and value of herrings; returns from line fishing about same as last year.
Lines.	Inshore.	25,141	7,369	.		1	
,,	,,	.	.	.		.	
,,	,,	.	.	.			

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class.		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Shetland District—contd.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
Mossbank and Dalesvoe	.	.	.	.	.	.	8	8	8	8	.	.	.	.	.	32	.
Ollaberry	.	.	.	.	.	.	5	5	5	5	.	.	.	.	.	18	.
North Roe	.	.	.	.	.	.	4	4	4	4	1	1	.	.	.	18	.
Fethaland and Sandvoe	.	.	.	.	.	.	5	5	5	5	.	.	1	1	.	22	.
Ronasvoe	.	.	.	.	.	.	4	5	4	5	.	.	.	.	.	15	.
Stennis	.	.	.	.	.	.	9	9	9	9	.	.	.	.	.	40	.
Hillswick and Brae	.	.	.	.	1	5	10	10	11	15	1	5	.	.	.	50	.
Voe and Papa	1	64	.	.	.	.	20	20	21	84	.	.	.	.	.	75	.
Sandness	.	.	.	.	.	.	8	8	8	8	.	.	.	.	.	36	.
Foula	.	.	.	.	.	.	12	12	12	12	.	.	.	.	.	40	.
Vaila Sound	1	33	.	.	.	.	10	10	11	43	.	.	.	.	.	50	.
Sand	.	.	.	.	.	.	5	5	5	5	.	.	.	.	.	25	.
Skeld and Reawick	.	.	.	.	.	.	6	6	6	6	.	.	.	.	.	28	.
Whiteness and Burwick	4	171	.	.	.	.	11	11	15	185	.	.	.	4	.	65	.
Scalloway	7	324	2	18	8	76	8	12	25	430	.	81	3	.	.	96	.
Burra Isle	24	865	1	11	8	76	22	30	55	982	.	.	2	20	.	166	.
Oxna, Linga, &c.	1	42	.	.	.	.	7	9	8	51	.	.	.	8	.	21	.
Trondra	2	101	.	.	.	.	8	12	10	113	.	.	1	3	.	40	.
South Havera	1	34	.	.	.	.	2	2	3	36	.	.	.	.	.	7	.
Totals	165	6,355	7	85	48	360	352	374	572	7,174	2	87	26	442	2	2,431	10
Stornoway District.																	
South Lochs Section.																	
Arivruaich to Lemreway (Lewis, Ross-shire)																	
Gravir ,,																	
Colbost ,,	5	175	6	90	35	210	17	44	63	519	3	4	.	.	.	396	.
Marvaig ,,																	
Cromore ,,																	
Garryvard to Keose ,,																	
North Lochs Section.																	
Luerbost (Lewis, Ross-shire)																	
Crossbost ,,	12	420	4	60	23	138	5	13	44	631	2	104	.	.	.	293	.
Ranish ,,																	
Grimshader ,,																	
Stornoway Section.																	
Stornoway (Lewis, Ross-shire)																	
Sandwick ,,	11	391	3	51	8	48	4	11	26	501	5	221	.	.	.	87	.
Holm ,,																	
Melbost and Stenish ,,																	
Garrabost Section.																	
Swordale and Knock (Lewis, Ross-shire)																	
Bayble ,,	11	385	1	15	13	78	7	18	32	496	.	.	4	82	.	412	.
Garrabost ,,																	
Portnaguran Section.																	
Sheshader (Lewis, Ross-shire)																	
Portvoller ,,	5	175	1	15	22	132	10	23	38	345	.	.	7	99	.	282	.
Portnaguran ,,																	
Shader ,,																	
Back Section.																	
Long (Lewis, Ross-shire)																	
Coll ,,																	
Vatisker ,,	3	105	.	.	14	84	12	30	29	219	.	.	4	54	.	515	.
Back ,,																	
Tolsta ,,																	

* Persons from inland centres temporarily engaged in fishing.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Lines. ,, ,, ,, ,, ,, Nets and lines.	Inshore. ,, ,, ,, ,, ,, St. Magnus Bay.	1,478	320	.	Herrings, saithe, and haddocks.	1 . 1 .	Increase in quantity and value of herrings; line fishing shows little change.
		1,267	341	47	Herrings, haddocks, and saithe.	. . 1	Decrease in quantity and value of herrings; slight improvement in haddock fishing.
Lines. ,, ,, Nets and lines.	,, ,, Round the isle. 1 to 40 miles off.	4,143	1,270	61	,,	. 2 1 1	Improvement in herring and small-line fishings; decrease in quantity and value of cod.
Lines. ,, Nets and lines. ,, ,, ,, ,, ,,	1 to 10 miles off. ,, 1 to 60 miles off. ,, ,, ,, ,, ,,	32,603	13,588	263	Herrings, cod, haddock, and saithe.	. . . 12 1 . . .	Decrease of about 50 per cent. in quantity and value of herrings: decrease in quantity and value of haddocks; but substantial increase in quantity and value of cod, &c., due to improvement in cod-net fishing.
		771,694	347,270	624		103	
Nets and lines.	The Minch.	1,817	622	352	Cod, ling, and eels.	.	Very little fishing at these creeks. The larger sized boats fish from Stornoway.
,,	,,	3,970	958	222	,,	.	,, ,, ,, ,,
,,	,,	539,047	172,388	410	Herring.	69	Record winter herring fishing.
,,	Broadbay and the Minch.	1,708	520	228	Cod, ling, and haddocks.	1	Cod and ling fishing on the decline.
,,	,,	3,747	1,517	.	,,	.	,, ,, ,,
,,	Broadbay.	1,731	667	15	Haddocks.	.	Small-line fishing occasionally for home supplies. The larger sized boats fish from Stornoway.

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class.		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Stornoway District—contd.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
NESS SECTION.																	
Skegersta (Lewis, Ross-shire) .																	
Port of Ness ,, .																	
Borve ,, .	.	.	.	.	12	72	18	46	30	118	.	.	18	94	9	583	.
Shader—West ,, .																	
SHAWBOST SECTION.																	
Barvas (Lewis, Ross-shire) .																	
Brue ,, .																	
Arnol ,, .	.	.	1	15	9	54	8	21	18	90	.	.	1	24	.	346	.
Bragar ,, .																	
Shawbost ,, .																	
CARLOWAY SECTION.																	
Carloway (Lewis, Ross-shire) .																	
Tolstachuilish ,, .	.	.	6	85	11	66	3	13	20	164	.	4	2	.	.	295	.
Breasclete ,, .																	
Callanish ,, .																	
BERNERA SECTION.																	
Lundale to Earshader (Lewis, Ross-shire) .																	
Tobson ,, .	.	.	1	15	32	192	6	21	39	228	2	14	.	.	.	163	.
Valsey ,, .																	
Breaclete and Hacklet ,, .																	
Kirkibost ,, .																	
VALTOS SECTION.																	
Valtos and Kneep (Lewis, Ross-shire)																	
Uigan and Arduig ,, .	.	.	2	30	9	54	4	11	15	95	.	.	.	18	.	137	.
Croulista ,, .																	
Islivaig, Breanish, &c. ,, .																	
Loch Hamnevy ,, .																	
NORTH HARRIS SECTION.																	
Cluer to Grozabay (Harris, Inverness-shire)																	
Scadabay ,, .																	
Plockropool ,, .																	
Drinnishader ,, .																	
Meavig ,, .																	
Derriclate ,, .																	
Taransay Island ,, .	.	.	1	15	42	252	17	45	60	312	.	.	11	51	.	247	.
Scarp Island ,, .																	
Ardhasig ,, .																	
Tarbert and Urgha ,, .																	
Kyles of Scalpay ,, .																	
Mollinganish ,, .																	
Rennigedle ,, .																	
Marig and Ardvourlie ,, .																	
SCALPAY SECTION.																	
Scalpay and Scotasay Islands (Harris, Inverness-shire)	.	.	4	60	33	198	12	30	49	288	8	37	.	.	.	110	.
SOUTH HARRIS SECTION.																	
Obbe to Kintilivaig (Harris, Inverness-shire)																	
Stroud ,, .																	
Finsbay ,, .																	
Cudinish ,, .	.	.	.	.	57	342	18	48	75	390	.	.	4	14	.	200	.
Flodabay ,, .																	
Manish ,, .																	
Geocrab and Licisto ,, .																	
Stockinish and Lachlee ,, .																	
Totals . .	47	1,651	30	451	320	1,920	141	374	538	4,396	20	384	51	436	9	4,066	.

* Persons from inland centres temporarily engaged in fishing.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Lines.	The Minch and off the Butt of Lewis.	5,378	1,793	.	Cod and ling.	.	Line fishing on the decline.
Lines and lobster creels.	Atlantic side of the island.	2,575	439	156	Cod and saithe.	.	Line fishing and lobsters show a slight increase.
,,	Lochroag and off Lochroag, 15 miles.	28,843	8,418	238	Cod and ling.	2	Cod and ling fishing station, having a good harbour. Fishing prosecuted entirely by local craft.
,,	,,	2,140	439	814	Cod, ling, and lobsters.	1	Line fishing on the decline.
,,	Lochroag and off Lochroag.	1,085	297	29	Ling fish chiefly.	2	,, ,,
Nets and lobster creels.	The Minch and Sea Lochs.	1,179	370	683	Herring and lobsters.	1	Herring show a decrease; and lobsters a slight increase.
,,	,,	5,496	2,721	603	,,	4	About half the quantity of fish landed as compared with 1912.
,,	,,	7,496	1,609	1,067	,,	3	A slight increase in herrings and lobsters.
		606,212	192,758	4,817		83	

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class.		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Barra District.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
Boreray (Inverness shire).	.	.	.	.	3	12	3	6	6	18	.	.	.	.	.	17	.
Berneray ,, .	.	.	.	.	12	48	1	2	13	50	.	.	.	.	.	40	.
Hougharry to Loch Eport ,, .	.	.	.	.	7	28	4	8	11	36	1	4	.	.	.	41	.
Grimsay ,, .	.	.	.	.	18	72	5	10	23	82	.	.	.	.	.	43	.
Heisker ,, .	.	.	.	.	4	16	2	4	6	20	.	.	.	.	.	16	.
Benbecula ,, .	.	.	.	.	8	32	15	30	23	62	1	2	.	.	.	55	.
Loch Carnan ,, .	.	.	1	16	15	60	25	50	41	126	.	.	.	.	.	96	.
Loch Skipport ,, .	.	.	1	16	4	16	6	12	11	44	1	2	.	.	.	32	.
Loch Boisdale ,, .	1	32	3	48	18	72	28	56	50	208	1	4	.	.	.	140	.
Eriskay ,, .	.	.	18	289	14	56	9	18	41	363	1	4	.	.	.	158	.
Bruernish ,, .	.	.	14	224	8	32	4	8	26	264	.	.	.	.	.	80	.
Ault and Ersary ,, .	.	.	4	64	1	4	5	10	10	78	1	16	.	.	.	52	.
Brevig and Skallary ,, .	1	28	3	48	3	12	1	2	8	90	.	.	.	.	.	35	.
Castlebay ,, .	.	.	19	304	8	32	7	14	34	350	5	.	.	15	.	193	.
Mingulay ,, .	.	.	.	.	.	.	.	.	.	.	.	.	4	24	.	.	.
Totals . .	2	60	63	1,009	123	492	115	230	303	1,791	11	32	4	39	.	998	.
Lochbroom District.																	
Cape Wrath to Laxford.																	
Poulin (Sutherland) .	.	.	.	.	.	.	3	8	3	8	.	.	.	.	.	14	.
Oldshoremore to Oldshorebeg .	.	.	.	.	1	3	13	33	14	36	.	.	1	3	2	35	.
Kinlochbervie	.	.	.	.	1	5	3	5	4	10	.	.	.	.	.	6	.
Badcall and Achriskill ,, .	.	.	.	.	.	.	11	22	11	22	.	1	.	.	2	25	.
Ardmore ,, .	.	.	.	.	.	.	4	11	4	11	1	3	.	.	.	6	.
Laxford to Badcall.																	
Findlemore and Fanagmore ,, .	.	.	.	.	.	.	7	10	7	10	.	.	.	.	.	11	.
Tarbert and Scourie ,, .	.	.	.	.	.	.	10	20	10	20	.	.	1	18	2	20	.
Badcall ,, .	.	.	.	.	.	.	6	12	6	12	.	.	1	18	.	10	.
Badcall to Drumbeg.																	
Unapool (Glendhu) ,, .	.	.	.	.	.	.	4	7	4	7	.	.	.	.	.	10	.
Ardvaar and Nedd ,, .	.	.	.	.	1	3	4	8	5	11	.	.	.	.	.	10	.
Drumbeg to Culkein.																	
Drumbeg ,, .	.	.	.	.	1	4	1	2	2	6	.	.	.	.	.	5	.
Culkein (Drumbeg) ,, .	.	.	1	8	.	.	7	13	8	21	.	.	.	.	1	14	.
Clashnessie ,, .	1	36	.	.	1	5	1	2	3	43	.	.	1	2	.	10	.
Achnacarion ,, .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	10	.
Culkein to Inverpolly.																	
Culkein (Stoer) ,, .	.	.	.	.	.	.	2	4	2	4	.	.	.	.	.	20	.
Raffan and Balnacladich ,, .	.	.	.	.	.	.	9	21	9	21	.	.	.	.	1	52	.
Clachtol ,, .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	20	.
Achmelvich ,, .	1	45	.	.	.	.	3	4	4	49	.	.	.	.	.	22	.
Lochinver and Strathan ,, .	1	34	.	.	2	14	6	11	9	59	.	.	.	.	.	22	.
Badnaban and Inverkirkaig ,, .	.	.	.	.	.	.	4	9	4	9	.	.	.	.	.	15	.

* Persons from inland centres temporarily engaged in fishing.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Nets, lines, and creels.	Sound of Harris and vicinity of islands.	60	6	674	Lobsters.	.	White fishing of little importance. Lobster fishing compares favourably with the previous year.
,, ,, ,, ,, ,,	The Minch inshore.	247	73	2,226	,,	.	Decrease in white fish. Shell fisheries show 23 per cent. increase in value over the year 1912.
,,	The Minch and Lochs.	538	71	311	Mackerel and lobsters.	1	Slight decrease in shell-fish return.
,,	Sea Lochs and vicinity.	42	10	16	,,	.	Fishermen of this creek land their fish at Loch Boisdale.
,,	The Minch inshore.	6,796	3,670	1,197	Herring and lobsters.	5	Decrease in both herrings and white fish. Shell-fish landings nearly double the previous year's figures.
,,	,,	266	119	.	Ling.	1	Fishermen of this creek fish from Castlebay.
,, ,, ,, ,, ,,	Skerryvore, Gunna Sound, Heisker Canna, and Coll Bank. Also inshore Barra.	122754	77,149	2,424	Herrings, cod, ling, saithe, and lobsters.	20	Marked increase in quantity and value of herrings. Great-line fishing a failure. Shell fisheries similar to the previous year.
		130.703	81,098	6,848		27	
Lines and lobster creels.	Minch and Lochinchard.	1,576	392	366	Herring, cod, and lobsters.	1	Considerable increase in quantity and value of white fish, due mainly to landings of herrings at Lochclash in winter. Slight increase in value of shell-fish.
,,	Minch, Loch Inchard, and Cairnbawn.	182	65	510	Lobsters.	.	Little attention given to line fishing. The value of shell fish-shows an increase of £53.
,,	Lochs Glendhu and Glencoul.	1,244	578	950	Cod, haddocks, and lobsters.	.	The quantity and value of white fish have decreased by 34·8 and 38·4 per cent. respectively, while the value of shell-fish has increased by 65·2 per cent.
,,	Minch and Cairnbawn.	232	83	402	Herring and lobsters.	.	White fish fishing unimportant. The value of shell-fish shows a decrease of £188.
Nets, lines, and lobster creels.	Minch, Lochinver, and Enard Bay.	4,691	1,109	415	Herrings, cod, haddocks, and lobsters.	1	The quantity and value of herrings show an increase of 2398 cwts. and £485 respectively. Other kinds of white fishing less productive than formerly. Decrease in value of shell-fish.

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class.		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Loch Broom District—contd.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
Coigaih and Tanera.																	
Achnahaird and Reif (Ross-shire)	.	.	.	.	2	6	2	5	4	11	.	.	.	.	.	12	.
Altandhu ,,	1	35	.	.	3	12	4	9	8	56	.	.	.	.	.	28	.
Polbain and Tanera ,,	.	.	1	12	13	56	11	21	25	89	.	.	1	17	4	44	.
Achiltibuie and Badnescally ,,	.	.	.	.	1	5	2	4	3	9	.	.	1	2	.	30	.
Polglass and Culnacraig ,,	.	.	2	14	4	28	6	12	12	54	.	.	1	5	4	30	.
Loch Broom and Islemartin.																	
Islemartin and Ardmair ,,	.	.	.	.	2	12	5	11	7	23	.	.	.	.	.	10	.
Rhue and Morefield ,,	.	.	.	.	.	.	4	8	4	8	.	.	1	2	1	12	.
Ullapool ,,	.	.	.	.	8	55	11	22	19	77	2	6	.	.	5	40	.
Rheroy, Ardendrean, Letters, &c. ,,	.	.	.	.	11	97	14	30	25	127	.	.	4	10	5	62	.
Achmore and Little Loch Broom.																	
Achmore and Scorraig ,,	.	.	.	.	2	8	11	22	13	30	.	.	1	3	3	28	.
Charnock and Badralloch ,,	.	.	.	.	.	.	1	3	1	3	.	.	.	.	.	5	.
Ardessie and Badcall ,,	.	.	1	8	2	11	3	6	6	25	.	.	.	.	2	19	.
Durnamuch and Badlurach ,,	.	.	.	.	1	6	6	14	7	20	.	.	1	2	1	20	.
Gruinard to Aultbea.																	
First and Second Coast ,,	.	.	.	.	.	.	1	3	1	3	.	.	.	.	.	6	.
Sand and Said ,,	.	.	.	.	1	6	5	11	6	17	.	.	.	5	1	22	.
Achgarve and Udrigle ,,	.	.	1	7	.	.	.	.	1	7	.	.	.	.	.	11	.
Opinin and Mellon Charles ,,	.	.	1	9	1	3	3	7	5	19	.	.	.	.	1	48	.
Ormscaig and Balnaluib ,,	.	.	1	8	1	4	5	12	7	24	.	.	.	.	1	16	.
Tenefin and Aultbea ,,	.	.	.	.	3	25	3	7	6	32	.	.	.	.	.	15	.
Aultbea to Melvaig.																	
Poolewe and Nast ,,	.	.	.	.	.	.	1	2	1	2	.	.	.	.	.	14	.
Inverasdale ,,	.	.	.	.	.	.	12	16	12	16	.	.	1	9	2	24	.
Cove ,,	.	.	2	21	2	20	7	14	11	55	.	.	.	.	1	23	.
Melvaig to Flowerdale.																	
Melvaig ,,	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	16	.
North Erradale ,,	.	.	.	.	1	6	.	.	1	6	1	6	.	.	.	3	.
Sand ,,	.	.	.	.	5	24	.	.	5	24	1	5	.	.	.	20	.
Strath ,,	.	.	.	.	5	28	.	.	5	28	.	4	.	.	.	26	.
Charlestown ,,	.	.	.	.	1	3	1	2	2	5	.	.	.	.	.	4	.
Flowerdale to South Point of Gairloch.																	
Badachro ,,	1	22	3	42	11	62	2	7	17	133	.	.	.	.	2	18	.
Port Henderson ,,	.	.	.	.	5	35	.	.	5	35	.	.	1	6	.	32	.
South Erradale ,,	.	.	1	13	1	5	.	.	2	18	1	5	.	.	.	8	.
Red Point ,,	.	.	.	.	2	9	.	.	2	9	.	.	.	.	.	10	.
Totals . .	5	172	14	142	95	560	218	450	332	1,324	6	30	16	102	41	993	.

* Persons from inland centres temporarily engaged in fishing.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Nets, lines, and lobster creels.	Minch and Loch Broom	1,229	501	525	Codlings, haddocks, and lobsters.	.	Results similar to those of 1912.
Herrings and cod nets, lines, and lobster creels.	,,	3,666	1,540	30	Herrings, haddocks, and codlings.	5	Marked decrease in quantity and value of all kinds of fish. A welcome extension is now being made to the pier at Ullapool.
Nets, lines, and lobster creels.	Minch, Loch Broom, and Little Loch Broom.	288	111	70	Herrings and lobsters.	.	Very little done at fishing.
,,	Minch and Loch Ewe.	2,883	1,069	399	Herring, codlings, and lobsters.	2	Slight increases in quantity and value of white fish and shell-fish. Herring fishing again a failure.
,,	,,	335	100	121	Herrings, haddocks, and lobsters.	.	Results similar to those of 1912.
Nets and lines.	Minch and Gairloch Bay.	358	71	28	Haddocks and codlings.	.	Only line fishing engaged in. The fishermen of this section engage in the herring and cod-net fishing from Badachro.
Nets, lines, and lobster creels.	,,	14,171	4,108	77	Herrings, mackerel, cod and saithe.	4	Increases of 33·8 and 57·8 per cent. respectively in the quantity and value of white fish, due mainly to success of herring and cod-net fishing. Line and lobster fishing received very little attention.
		30,855	9,727	3,893		13	

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class.		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Loch Carron and Skye District.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
Loch Torridon (Ross-shire)	.	.	.	.	11	62	9	12	20	74	.	.	5	10	2	60	.
Applecross ,,	.	.	.	.	8	73	4	9	12	82	.	.	3	8	2	34	.
Kishorn ,,	.	.	.	.	4	34	3	6	7	40	.	.	3	12	.	22	.
Loch Carron ,,	.	.	2	17	24	147	6	10	32	174	5	28	.	.	2	72	.
Loch Alsh ,,	.	.	.	.	.	.	.	.	.	.	.	.	16	64	.	.	.
Loch Hourn (Inverness-shire)	.	.	.	.	.	.	16	27	16	27	.	.	.	.	3	28	.
Sleat ,,	.	.	.	.	23	97	12	29	35	126	.	.	11	36	4	62	.
Kyleakin ,,	1	20	2	52	4	22	.	.	7	94	.	.	1	23	.	37	.
Broadford ,,	.	.	.	.	6	36	12	22	18	58	.	.	1	2	3	40	.
Scalpa Sound ,,	.	.	.	.	1	2	34	57	35	59	.	.	8	21	4	40	.
Sconcer and Braes ,,	.	.	.	.	.	.	34	62	34	62	.	.	3	10	3	50	.
Portree ,,	.	.	3	53	6	30	25	47	34	130	.	.	5	17	3	72	.
Staffin ,,	.	.	1	7	10	28	2	3	13	38	2	9	.	.	2	35	.
Loch Snizort ,,	1	18	.	.	30	137	7	11	38	166	1	10	.	.	.	90	.
Waternish ,,	.	.	9	110	19	61	3	4	31	175	2	26	.	.	.	70	.
Dunvegan ,,	.	.	.	.	16	67	9	15	25	82	8	29	.	.	.	60	.
Glendale and Bracadale ,,	.	.	.	.	10	31	10	13	20	44	3	9	.	.	1	60	.
Strathaird ,,	.	.	.	.	2	6	15	32	17	38	.	.	3	5	2	35	.
Lochs Slapin & Eyshort ,,	.	.	.	.	.	.	13	27	13	27	.	.	6	9	1	60	.
Isle of Soay ,,	.	.	.	.	.	.	3	5	3	5	.	.	3	13	.	12	.
Totals	2	38	17	239	174	833	217	391	410	1,501	21	111	68	230	32	939	.
Fort William District.																	
Loch Nevis and North Morar (Inverness)	.	.	.	.	4	15	7	16	11	31	.	.	.	.	2	18	.
Mallaig and South Morar ,,	1	21	2	27	15	60	7	9	25	117	.	7	3	.	6	48	.
Arisaig and Loch Aylort ,,	.	.	.	.	8	34	2	6	10	40	.	.	2	13	4	14	.
Sunisary to Ockle Point (Argyll)	.	.	.	.	7	30	4	7	11	37	.	.	.	.	3	14	.
Ockle Point to Loch Sunart ,,	.	.	.	.	3	7	5	7	8	14	.	.	1	2	1	24	.
Lochs Sunart and Aline ,,	.	.	.	.	.	.	.	.	.	.	.	.	1	1	.	.	.
Loch Eil and Fort William (Inverness)	.	.	.	.	1	2	27	27	28	29	.	.	2	12	3	54	.

* Persons from inland centres temporarily engaged in fishing.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Nets, lines, and creels.	Loch Torridon.	575	152	193	Herrings, cod, lobsters.	1	Slight increase in herrings and shell-fish, but a decrease in mackerel.
Nets and lines.	Between Skye and mainland.	110	26	8	Herrings, cod.	.	Creek of little importance as a fishing station.
Nets, lines, and creels.	,,	3,685	936	304	Saithe, hake, crabs.	.	Increase in quantity and value of fish landed. The fishermen of these creeks are the most progressive in the district.
,,	,,				,,	.	
,,	District Lochs.	14,419	4,484	147	Herrings, mackerel.	4	Slight improvement in quantity and value of fish landed.
,,	Loch Hourn.	105	24	93	Cod, saithe, lobsters.	.	Decrease in all kinds. Herring fishing a failure since 1904.
,,	Inshore.	1,547	657	314	Herrings, cod, lobsters.	1	Decrease in all classes of white fish and shell-fish.
,,	Between Skye and mainland.	2,360	966	638	Cod, eels, lobsters.	.	Increase in herrings and mackerel, but decrease in all other kinds.
Nets and lines.	,,				Cod, saithe.	.	
,,	Sound of Raasay and Scalpa.				,,	.	
,,	,,	356	88	53	,,	.	Creeks of no importance.
Nets and creels.	Between Skye and mainland.	1,367	364	1,899	Herrings, mackerel, lobsters.	2	Decrease in herrings and mackerel. Increase in shell-fish.
Nets, lines, and creels.	Inshore.	10,595	4,343	853	Lobsters.	.	Considerable decrease in quantity and value of herrings landed. Marked improvement in lobster fishing.
,,	Loch Snizort, and Minch.				Herrings, lobsters.	6	
,,	The Minch.	5,944	1,975	822	Herrings, lobsters.	1	A decrease in all kinds of white fish. Lobsters show a slight increase.
,,	,,				,,	2	
,,	Lochs Pooltiel and Bracadale.	12,790	3,446	1,007	,,	3	Increase in lobsters. Herring fishing results similar to those of last year. Winter fishing successful, but late autumn fishing results show a decrease.
,,	Lochs Slapin and Eyshort.	932	290	257	,,	.	Decrease in herrings and line fish; slight increase in shell-fish.
,,	,,				,,	1	
Creels.	Inshore.	96	19	482	Lobsters.	.	Substantial increase in lobsters.
		54,881	17,770	7,070		21	
Nets and lines.	In loch.	172	58	.	Cod and saithe.	.	Little change in the results at this creek. Landings confined to local consumption.
Nets, lines, and creels.	In various lochs and Minch.	123,735	50,606	233	Herrings, cod, ling, eels, and skate.	8	A small increase in quantity, but considerable increase in value compared with 1912. Failure in loch fishing during December very much affected landings, December alone being over 20,000 cwts. short this year.
Lines and creels.	Off coast.	15	11	230	Flounders and shell-fish.	.	Returns continue to decline, the landings being mostly made at Mallaig.
Cod nets and lines.	Moidart Bay.	181	91	.	Haddocks.	.	A fair increase in the quantity landed, the improvement being chiefly in cod.
Nets, lines, and creels.	Off coast.	510	189	260	Cod, flounders, and shell-fish.	.	A decided retrograde movement was experienced here principally in herrings. Shell fisheries well maintained at last year's level.
,,	.	4	3	76	.	.	Production of shell fisheries much the same as in 1912.
Nets and lines.	Loch Linnhe.	598	266	28	Herrings and whitings.	.	Little change from the previous year. Herring fishing again poor.

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Fort William District—contd.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
North and South Corran . . (Argyll)	.	.	.	.	1	3	4	5	5	8	.	.	2	2	2	14	.
Loch Leven and Kentallen ,,	1	47	.	.	.	.	2	1	3	48	.	.	1	3	1	12	.
Cuil, Appin, and Loch Creran ,,	.	.	.	.	1	4	2	3	3	7	.	.	.	.	1	9	.
Loch Etive and Oban ,,	.	.	.	.	9	16	16	20	25	36	1	3	.	.	7	36	.
Lismore ,,	.	.	.	.	1	2	3	4	4	6	.	.	.	.	.	7	.
Tobermory and Salen ,,	.	.	.	.	3	20	7	9	10	29	.	.	1	4	2	27	.
Lochs Don, Spelve, and Buie ,,	.	.	.	.	1	5	5	9	6	14	.	.	1	2	3	18	.
Carsaig to Kintra ,,	.	.	.	.	.	.	1	2	1	2	.	.	1	2	.	8	.
Lochs Laich and Scriddan ,,	.	.	.	.	2	11	9	12	11	23	.	.	2	19	3	26	.
Ulva, Lochs Na-Kael and Tuadh (Argyll)	.	.	.	.	1	2	8	15	9	17	.	.	.	.	.	20	.
Coll ,,	.	.	.	.	.	.	13	16	13	16	.	.	.	.	.	18	.
Tiree ,,	.	.	2	20	1	2	19	28	22	50	.	.	.	.	4	66	.
Iona ,,	.	.	.	.	.	.	3	5	3	5	.	.	.	.	.	9	.
Canna (Inverness)	.	.	.	.	1	3	2	3	3	6	.	.	.	1	.	9	.
Rum, Muck, and Eigg ,,	.	.	1	17	1	2	3	5	5	24	.	1	.	.	.	12	.
Totals . . .	2	68	5	64	60	218	149	209	216	559	1	11	17	61	42	463	.
Campbeltown District.																	
Skipness and Clonaig (Argyll)	.	.	.	.	1	6	.	.	1	6	.	.	.	.	.	4	.
Carradale and Torrisdale, &c. ,,	.	.	.	.	29	212	.	.	29	212	.	1	1	.	2	130	.
Campbeltown and Machrihanish (Argyll)	.	.	1	16	81	646	5	6	87	668	.	8	9	.	2	318	.
Sanda ,,	.	.	.	.	3	14	.	.	3	14	.	.	.	.	.	4	.
Southend ,,	.	.	.	.	4	9	.	.	4	9	.	.	.	.	.	5	.
Muasdale and Ballochantee ,,	.	.	.	.	2	8	4	4	6	12	.	.	3	7	.	12	.
Gigha ,,	.	.	.	.	18	108	12	19	30	127	.	.	.	.	.	35	.
Port Ellen ,,	.	.	.	.	13	29	.	.	13	29	.	.	.	.	.	20	.

* Persons from inland centres temporarily engaged in fishing.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Nets and hand lines.	Loch Linnhe.	27	10	.	Herrings, saithe, and whelks.	.	With the continued absence of herrings in Loch Linnhe this section shows little change.
,,	,,					.	
,,	,,	33	11	40	Saithe and whelks.	.	Same as above.
Drift, and cod nets and lines.	Firth of Horn, and off Dhuartach.	23,365	8,734	25	Herrings, cod, and skate.	3	Slight reduction in quantity but an increase in value. Herring fishing gave very moderate results.
Hand lines.	Loch Linnhe.	19	6	.	Eels and skate.	.	Fishing in this island is declining, the fishermen seeking other employment during the greater part of year.
Nets, lines, and creels.	Sound of Mull.	405	235	286	Haddocks and lobsters.	.	Little variation. Lobster fishing well maintained.
,,	In lochs.	140	50	30	Herrings and lobsters.	.	Owing to failure of Loch fishing, perhaps more than any other this creek has failed. Crofter fishermen have almost abandoned all effort at fishing. Results slightly less than in 1912.
Hand lines and creels.	Off coast.	.	.	33	Flounders and lobsters.	.	A moderate increase in value of shell fish.
Nets, lines, and creels.	In lochs.	29	14	232	Haddocks and shell fish.	.	No improvement in line or net fishing, but fair increase in value of shell fish.
Creels.	Around Treshnish Isles.	.	.	577	Lobsters.	.	Quantity of shell fish well maintained, but a slight decrease in value.
Lines and creels.	Off Island.	52	14	105	,,	.	Failure of spring great line fishing accounts for a decided decline in quantity landed. Value of shell fish also less.
,,	,,	265	82	158	Ling and lobsters.	.	This creek continues to show poor results. Line and shell fisheries both show a slight decline.
,,	Sound of Iona.	131	86	70	Cod and lobsters.	.	Largely owing to stormy weather during the winter months a decrease in quantity and value is shown.
Nets, lines, creels.	Off Islands.	350	115	219	Herrings and lobsters.	1	Value of shell fish well maintained, but decrease in other kinds, chiefly herrings, while value is much the same as in 1912.
Lines and creels.	,,	.	.	103	Lobsters.	.	The improvement recorded last year was not maintained, largely owing to stormy weather. A slight decrease in value.
		150,031	60,581	2,705		12	
Drift nets.	Kilbrennan Sound.	35	15	.	Herrings.	.	Fishing of little importance. Small quantities of herrings landed during the latter half of the year.
Seine nets and lobster creels.	,,	10,707	3,112	93	Herrings and lobsters.	.	Majority of the fishermen confine their operations entirely to herring fishing, only a few being engaged in fishing for lobsters. The catch and value, both of herrings and lobsters, show a considerable increase.
Seine nets, lines, and lobster creels.	,,	115,052	50,288	177	Herrings, mackerel, cod, saithe, whitings, plaice, and lobsters.	9	Large increase in quantity and value of herrings. The returns of lobsters also show an increase, but line fishing continues to decline, and is becoming of little importance.
Lobster creels.	Around the Island.	.	.	65	Lobsters.	.	Fishing confined to lobsters. Results show a big decrease.
Lines and lobster creels.	Along the coast.	151	74	53	Cod, saithe, and lobsters.	.	Slight increase in quantity and value of cod, but large decrease in saith and lobsters.
Lobster creels.	1 to 3 miles off the coast.	.	.	197	Lobsters.	.	Operations confined to lobster fishing. Increase in number and value.
Drift nets, lines, and lobster creels.	Around the Island, and from 1 to 5 miles S.W. from Cara.	713	216	222	Cod and lobsters.	4	Considerable decline in cod fishing, but little change with regard to lobsters.
Lobster creels.	Along the coast to M'Arthur Head.	.	.	570	Lobsters.	.	Results not so satisfactory as those of the previous year.

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class.		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Campbeltown District—contd.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
Portaskaig (Argyll)	.	.	.	.	8	19	3	3	11	22	.	.	.	.	1	14	.
Portnahaven and Port-Wemyss, &c. ,,	.	.	.	.	32	75	31	7	63	82	.	.	9	17	12	90	.
Bowmore ,,	.	.	.	.	5	6	3	4	8	10	.	.	4	6	.	12	.
Port Charlotte ,,	.	.	.	.	5	12	.	.	5	12	.	.	1	4	.	12	.
Bruichladdich ,,	.	.	.	.	3	10	.	.	3	10	.	.	1	2	.	4	.
Loch Gruinart ,,	.	.	.	.	3	9	.	.	3	9	.	.	1	1	1	4	.
Jura ,,	.	.	.	.	2	6	2	2	4	8	.	.	3	9	.	8	.
Colonsay ,,	.	.	.	.	3	6	3	3	6	9	.	.	.	1	.	13	.
Totals . .	.	.	1	16	212	1,175	63	48	276	1,239	.	9	32	47	18	685	.
Inveraray District.																	
Luing (Argyll)	.	.	.	.	5	25	42	41	47	66	1	5	.	.	5	40	.
Crinan and Loch Sween ,,	.	.	.	.	2	11	4	4	6	15	.	.	.	.	3	3	.
Lochkylesport ,,	.	.	.	.	.	.	1	1	1	1	.	.	1	1	.	2	.
Tarbert ,,	.	.	.	.	63	505	5	9	68	514	.	.	6	39	4	230	.
Ardrishaig ,,	.	.	.	.	35	196	4	4	39	200	.	.	4	25	6	76	.
Lochgilphead ,,	.	.	.	.	11	76	1	1	12	77	.	.	2	8	3	28	.
Castleton ,,	.	.	.	.	6	42	1	1	7	43	.	.	.	.	1	12	.
Lochgair ,,	.	.	.	.	2	4	1	1	3	5	.	.	.	.	.	5	.
Minard ,,	.	.	.	.	5	51	4	4	9	55	.	.	1	6	.	23	.
Crarae ,,	.	.	.	.	3	20	.	.	3	20	.	.	.	.	1	12	.
Furnace ,,	.	.	.	.	1	5	3	4	4	9	.	.	.	.	2	3	.
Kenmore ,,	.	.	.	.	1	8	.	.	1	8	.	.	2	8	.	2	.
Inveraray ,,	.	.	.	.	3	12	4	5	7	17	.	.	.	.	2	4	.
Cairndhu to Newton ,,	.	.	.	.	2	12	2	2	4	14	.	.	3	11	1	6	.
Otter to Ardlamont ,,	.	.	.	.	1	4	1	1	2	5	.	.	.	.	.	3	.
Totals . .	.	.	.	.	140	971	73	78	213	1,049	1	5	19	98	28	449	.
Rothesay District.																	
Rothesay (Buteshire) . .	.	.	.	.	6	31	12	14	18	45	1	5	.	.	.	17	.
Port Bannatyne ,, . .	.	.	.	.	4	7	2	2	6	9	.	.	.	.	.	8	.
St. Ninians ,, . .	.	.	.	.	6	35	6	7	12	42	1	7	.	.	.	12	.

* Persons from inland centres temporarily engaged in fishing.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Lobster creels.	Sound of Islay.	.	.	637	Lobsters.	.	Substantial increase in catch and value.
Lines and lobster creels.	1 to 5 miles off Rhynns Lighthouse.	216	86	23	Cod and lobsters.	.	Large decrease in cod. Number and value of lobsters similar to previous year's returns.
Drift nets and lines.	Lochindaal.	330	275	.	Herrings, cod, and plaice.	.	Considerable falling off all round, returns showing a decrease in quantity and value of all kinds of fish.
,,	,,	122	50	.	Herrings, cod, haddocks, and plaice.	.	Total value about half that of 1912.
Drift nets, lines, and lobster creels.	,,	515	160	57	Herrings, plaice, and lobsters.	.	Slight increase in herrings; little difference in quantity and value of line fish and lobsters.
Lines.	Lochgruinart Bay.	430	66	133	Saithe and whelks.	.	Decrease in saithe and shell-fish.
Lobster creels.	Around the island.	.	.	38	Lobsters.	.	Large decrease in the number and value of lobsters.
,,	,,	.	.	179	,,	.	
		128,271	54,342	2,444		13	
Lobster creels.	Vicinity of Luing and neighbouring islands.	.	.	516	Lobsters.	.	Decrease in quantity and value of lobsters. Slight increase in unclassified shell-fish.
,,	Vicinity of Crinan.	.	.	250	Lobsters and oysters.	.	This creek also exhibits decrease in lobster catch, fewer crews being employed. Shrinkage of about 50 per cent. in quantity and value of oysters.
,,	Lochkylesport and vicinity.	.	.	193	Lobsters.	.	One local and three stranger crews landed lobsters at this creek. Increase in catch and value.
Seine and drift nets and lines.	Lochfyne and Kilbrannan Sound.	7,091	2,823	127	Herrings, mackerel, saithe, and codlings.	2	Catch and value of herrings show increases of 50 per cent. and 100 per cent. respectively. Mackerel exhibits a decrease, while line fish remains practically the same.
,,	,,	6,501	2,812	.	Herrings, mackerel, and codlings.	4	Marked increase in quantity and value of herrings, and slight improvement in landings by line boats.
,,	,,	.	.	.	.	.	All fish sold at sea or landed at Ardrishaig. Local crews fished from Lochboisdale in early summer with fair results.
,,	,,	431	222	3	Cod and codlings.	.	All herrings sold at sea. Line fishing slightly improved, but decreased catch by cod nets.
Drift nets, cod nets, and lines.	Upper reaches of Lochfyne.	99	42	.	Mackerel.	.	Only small rowing boats engaged in this section and the landings are of little importance.
		14,122	5,899	1,089		6	
Nets and lines.	Firth of Clyde.	4,370	1,686	44	Herrings, mackerel, cod, conger eels, and skate.	2	Decrease in catch and value, chiefly in herrings and conger eels.
,,	,,					.	
Nets, lines, and creels.	Off west of Bute.	562	347	103	Herrings and cod.		Increase in quantity and value of herrings.

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class.		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Rothesay District—contd.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
Kilchattan (Buteshire)	.	.	.	.	2	12	3	4	5	16	.	.	.	.	.	5	.
Kyles of Bute (Argyllshire)	.	.	.	.	8	31	8	10	16	41	.	.	5	10	.	15	.
Toward to Holy Loch ,,	.	.	.	.	2	3	4	4	6	7	.	.	.	.	.	11	.
Blairmore, Ardentinny, and Lochgoil (Dumbartonshire)	.	.	.	.	2	3	.	.	2	3	.	.	3	8	.	4	.
Kilcreggan to Arrochar ,,	.	.	.	.	10	29	8	8	18	37	.	.	1	3	.	21	.
Lochranza and Caticol (Arran)	.	.	.	.	2	15	1	1	3	16	.	.	.	.	.	8	.
Pirnmill to Blackwater ,,	.	.	2	32	2	10	2	2	6	44	.	.	4	18	.	13	.
Blackwater to Whiting Bay ,,	.	.	.	.	.	.	1	2	1	2	.	.	.	.	.	4	.
Whiting Bay to Lamlash ,,	.	.	.	.	.	.	3	3	3	3	.	.	.	.	.	6	.
Totals	.	.	2	32	44	176	50	57	96	265	2	12	13	39	.	124	.
Greenock District.																	
Gareloch (Dumbartonshire)	.	.	.	.	3	7	4	4	7	11	.	.	.	.	.	7	.
Helensburgh ,,	.	.	.	.	1	10	4	3	5	13	.	.	2	2	.	8	.
Glasgow (Lanarkshire)	†16	985	.	.	1	3	1	.	18	988	.	.	5	91	.	144	.
Port-Glasgow (Renfrewshire)	.	.	.	.	6	23	4	3	10	26	.	.	15	42	.	12	.
Greenock ,,	.	.	.	.	11	44	7	6	18	50	.	.	16	49	.	18	.
Gourock ,,	.	.	.	.	.	.	2	2	2	2	.	.	2	1	.	3	.
Wemyss Bay ,,	.	.	.	.	.	.	1	1	1	1	.	.	.	.	.	2	.
Largs (Ayrshire)	.	.	.	.	1	1	20	18	21	19	1	1	.	.	.	25	.
Cumbraes (Buteshire)	.	.	.	.	.	.	7	6	7	6	.	.	2	4	.	10	.
Fairlie (Ayrshire)	.	.	.	.	1	1	3	3	4	4	.	.	.	.	.	5	.
Saltcoats ,,	.	.	.	.	10	54	8	11	18	65	.	.	2	2	.	28	.
Ardrossan ,,	.	.	.	.	.	.	2	2	2	2	.	.	.	.	.	2	.

* Persons from inland centres temporarily engaged in fishing.
† Includes 16 trawlers of an aggregate tonnage of 985 tons.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Nets, lines, and creels.	Off south and east coasts of Bute.	998	386	34	Herrings, mackerel, and cod.	.	Increase in mackerel and cod. Decrease in herrings.
,,	Kyles of Bute and adjacent waters.	395	240	167	,,	.	Decrease in all kinds of fish.
Nets and lines.	Firth of Clyde.	224	292	108	Cod, flounders, and plaice.	.	This creek also shows decrease in all kinds of fish.
,,	Lochs Long and Goil.	1,998	387	48	Mackerel, cod, and saithe.	.	Decrease in quantity and value, shortage in mackerel and cod being most evident.
,,	,,						
,,	Kilbrannan Sound and adjacent waters.	1,801	593	2	Herrings and mackerel.	1	Increase in all kinds of fish but principally in herrings and mackerel.
,,	,,	13	13	12	Haddocks.	.	Of little importance so far as catch is concerned. Fishermen landed takes at other creeks.
Lobster creels, nets, and lines.	South and east of Arran.	8,220	4,159	29	Herrings and mackerels.	.	A marked decrease in quantity and value, chiefly in herrings. Mackerel alone shows an increase on last year's figures.
,,	,,						
		18,581	8,103	547		3	
Nets and lines.	Gareloch.	163	58	41	Mackerel, cod, ling, and mussels.	.	Slight increase in quantity and value.
,,	Firth of Clyde.	231	215	243	Codlings, haddocks, whitings, flounders, mussels, and winkles.	1	Increase in white fish but decrease in shellfish.
Otter trawls and lines.	West Coast.	935	868	.	Ling, halibut, and skate.	29	Occasional landings made by steam liners; local trawlers employed on East Coast.
Nets, lines, and mussel dredging.	Firth of Clyde.	20	18	148	Mussels.	1	Considerable decrease in mussels.
,,	,,	177	80	36	Cod, eels, and mussels.	3	Increase in white fish; decrease in mussels.
Nets and lines.	,,	54	26	.	Cod and herrings.	.	Fishing unimportant.
Lines.	,,	198	158	.	Codlings, saithe, whitings, and flounders.	.	Slight decrease in total landings.
Nets and lines.	,,	1,482	572	7	Herrings, mackerel, codlings, and flounders.	.	Decrease in herrings; increase in mackerel.
,,	,,	726	495	9	,,	.	No material change.
,,	,,	17,164	5,532	4	Herrings, mackerel, and flounders.	.	Marked increase in quantity and value of herrings landed.
Nets, lines, and creels.	,,	1,437	858	250	Herrings, codlings, plaice, skate, eels, and lobsters.	1	Increase in quantity and value of fish landed.
,,	,,						

APPENDIX A.—

STATION OR CREEK.	Fishing Boats and Vessels belonging to Creek.														Seaworthy Boats Unlaunched.	Resident Fishermen and Boys.	*Non-resident Fishermen and Boys.
	1st Class (including Steam Trawlers).				2nd Class.		3rd Class		Total.		Increase on 1912.		Decrease from 1912.				
	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.										
Greenock District—contd.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	Ton.	No.	No.	No.
Irvine (Ayrshire) . . .	.	.	.	.	14	62	2	3	16	65	.	.	4	11	.	28	.
Troon ,, . . .	.	.	.	.	6	12	3	4	9	16	.	.	.	.	.	9	.
Totals . .	16	985	.	.	54	217	68	66	138	1,268	1	1	48	202	.	301	.
Ballantrae District.																	
Ayr (Ayrshire) . . .	.	.	.	.	12	31	1	2	13	33	.	.	1	2	1	16	.
Dunure ,, . .	.	.	.	.	37	145	1	1	38	146	.	9	.	.	2	48	.
Maidens ,, . .	.	.	.	.	34	119	2	2	36	121	.	.	3	6	2	35	.
Girvan ,, . .	.	.	.	.	33	185	2	2	35	187	.	13	1	.	3	90	.
Carleton ,, . .	.	.	.	.	3	17	4	4	7	21	.	1	.	.	.	12	.
Ballantrae ,, . .	.	.	.	.	13	48	5	8	18	56	.	.	.	.	1	32	.
Cairnryan (Wigtownshire) .	.	.	.	.	3	9	.	.	3	9	.	.	1	1	.	5	.
Stranraer ,, .	.	.	.	.	19	114	22	30	41	144	6	16	.	.	3	63	.
Kirkcolm ,, .	.	.	.	.	.	.	8	9	8	9	.	.	.	1	.	12	.
Port Patrick ,, .	.	.	.	.	.	.	7	9	7	9	.	.	1	1	.	16	.
Port Logan ,, .	.	.	.	.	1	4	6	6	7	10	.	.	.	.	1	10	.
Drummore ,, .	.	.	.	.	10	80	7	7	17	87	.	.	1	1	.	24	.
Sandhead ,, .	.	.	.	.	2	4	8	9	10	13	.	.	.	3	1	14	.
Glenluce ,, .	.	.	.	.	2	4	8	9	10	13	.	.	.	3	.	14	.
Port William ,, .	.	.	.	.	1	2	12	12	13	14	.	.	1	2	1	16	.
Whithorn Isle ,, .	.	.	.	.	.	.	8	8	8	8	.	.	.	.	.	14	.
Garliestown ,, .	.	.	.	.	1	6	5	5	6	11	.	.	.	.		10	.
Creetown (Kirkcudbrightshire)	.	.	.	.	4	18	11	15	15	33	.	.	.	.		19	.
Kirkcudbright ,, .	.	.	.	.	.	.	6	6	6	6	.	.	.	.	.	10	.
Carsethorn (Dumfriesshire) .	.	.	.	.	2	5	.	.	2	5	.	.	.	.	.	14	.
Caerlaverock ,, .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	16	.
Powfoot ,, .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5	.
Annan ,, .	.	.	.	.	47	192	2	4	49	196	.	.	.	.	.	86	.
Totals . .	.	.	.	.	† 224	983	125	148	349	1,131	6	39	9	20	15	581	.
Grand Totals for 1913 . .	2646	98,681	410	5,407	2484	11,840	2972	4,743	8512	120671	.	.	352	1477	275	32,678	1145
Grand Totals for 1912 . .	2704	99,065	426	5,689	2625	12,372	3109	5,022	8864	122148	.	.	294	2638	280	33,135	1327

* Persons from inland centres temporarily engaged in fishing.
† Includes 45 sailing trawlers of an aggregate of 202 tons and 4 motor dredgers of an aggregate of 45 tons.

No. II.—*continued.*

Methods of Fishing pursued.	Position of Principal Fishing Grounds.	Quantity and Value of Fish Landed (excluding Shell Fish).		Value of Shell Fish taken.	Principal kinds of Fish Landed.	No. of Curing Stations.	General Remarks.
		Cwts.	£	£			
Nets and lines.	Firth of Clyde.	6,460	2,115	.	Herrings, mackerel, codlings, and flounders.	.	Marked decrease in returns of herrings landed.
Lines and creels.	,,	27	14	16	Mackerel and lobsters.	.	Similar to last year.
		29,074	11,009	754		35	
Nets and lines.	Firth of Clyde.	15,758	9,779	53	Herrings, cod, whitings, plaice, and mackerel.	14	Ayr, Dunure, and Maidens show decreases in herrings, the principal decrease occurring at the first-named creek. The value, however, is relatively higher. Flounder fishing improved.
,,	,,	4 419	2,505	66		.	
,,	,,	1,789	1,322	53		.	
,,	,,	6,830	2,266	215	General.	3	The chief increases are in herrings, mackerel, and cod, while the chief decreases occur in eels and skate. General result—fair improvement on last year.
,,	,,				Cod, saithe, lobsters.	.	
,,	,,	1,577	684	28	Cod and saithe.	.	Slight decrease in total quantity and value.
,,	Lochryan and off Corsewall.	42,260	19,794	4,740	Cod, haddocks, plaice.	.	Stranraer shows a decrease in quantity of herring, but an increase in value. Decreases in haddocks, eels, and skate, increases in cod, ling, and mackerel. Cairnryan and Kirkcolm boats land their herrings at Stranraer.
,,	,,				General.	17	
,,	,,				Cod and haddock.	.	
Lines and creels.	Channel.	867	477	119	Cod, crabs, and lobsters.	.	Decrease in quantity, but increase in value. Increase in lobsters and crabs.
,,	,,					.	
Nets, lines, and creels.	Luce Bay.	2,402	1,700	275	Mackerel, cod, plaice, skate, crabs, and lobsters.	.	Skate chiefly accounts for the increases in quantity and value of white fish, the other kinds showing a slight falling off. Decrease in lobsters and crabs.
,,	,,				,,	.	
,,	,,				,,	.	
,,	,,				,,	.	
Lines and creels.	Wigtown Bay.	417	441	286	Cod, crabs, lobsters.	.	Slight decrease in quantity of white fish, but increase in value. Lobsters and crabs show decreases, while mussels remain about the same.
Nets, lines, and creels.	,,				Cod and plaice.	.	
Nets and mussel crams.	Cree estuary.				Sparlings and mussels.	.	
Nets, lines, and creels.	Kirkcudbright Bay.	617	446	473	Lobsters and whelks.	.	Moderate decrease in catch of flounders, but an increase in value. The quantity of mussels landed nearly doubled, but a decrease in unclassified shell-fish.
Stake nets.	Nith estuary.				Flounders.	.	
,,	,,				Flounders and mussels.	.	
,,	Solway Firth.				Flounders.	.	
Trawling.	,,	789	1,017	3,051	Flounders, plaice, skate, and shrimps.	.	Decrease in quantity and value of flounders and plaice, while skate and shrimps show increases.
		77,725	40,431	9,359		34	
		7267328	3733379	72,357		898	
		8117826	3450829	67,594		916	

APPENDIX A.—No. III.

RETURN for the year 1913, showing the largest number of Boats, Decked and Undecked, *irrespective* of the places to which they belong, employed fishing for herrings, as well as the number of persons engaged in that industry, in each District in Scotland at *one* time.

DISTRICTS.	Date. Week ending.		Boats.	Fishermen and Boys.	Curers.	Coopers.	Gutters and Packers.	Labourers.	Total Persons Employed.
Eyemouth . . .	July	26	524	4,433	105	325	2,195	312	7,370
Leith . . .	Feb.	1	73	269	10	15	100	38	432
Anstruther . .	Mar.	1	194	1,124	33	104	180	47	1,488
Montrose . . .	Aug.	9	64	456	4	32	190	29	711
Stonehaven . .	July	26	13	78	5	8	66	2	159
Aberdeen . . .	,,	19	231	2,060	43	120	1,845	640	4,708
Peterhead . .	,,	26	430	3,426	78	347	1,900	272	6,023
Fraserburgh . .	Aug.	23	511	4,030	82	451	2,269	444	7,276
Banff . . .	June	7	139	973	12	24	156	17	1,182
Buckie . . .	July	5	137	959	13	26	204	13	1,215
Findhorn . . .	June	14	38	288	8	16	90	13	415
Cromarty . . .	Oct.	25	5	19	..	..	..	2	21
Helmsdale . .	Aug.	23	2	13	..	..	..	..	13
Lybster . . .	,,	23	10	50	1	3	15	..	69
Wick . . .	,,	9	325	2,575	55	291	1,546	192	4,659
Orkney . . .	June	28	250	1,940	35	213	1,298	177	3,663
Shetland . . .	May	31	767	6,920	80	767	3,183	518	11,468
Stornoway . .	,,	24	260	2,020	35	159	970	121	3,305
Barra . . .	,,	31	203	1,365	25	88	621	84	2,183
Loch Broom . .	Oct.	25	104	476	13	17	127	14	647
Loch Carron and Skye.	,,	11	128	512	25	16	101	5	659
Fort-William . .	May	24	42	368	31	18	105	21	543
Campbeltown . .	July	26	140	640	8	6	48	8	710
Inveraray . .	Aug.	23	120	502	6	..	28	5	541
Rothesay . . .	,,	9	81	319	3	..	14	6	342
Greenock . . .	Oct.	4	59	236	35	34	130	87	522
Ballantrae . .	Dec.	13	157	650	31	14	..	23	718

APPENDIX B.—No. I.

FISH LANDED.—STATEMENT of the Total Quantity and Value of Herrings taken by nets from Steam, Motor, and Sailing Boats respectively and landed in **Scotland** during the various Seasons of the Year 1913.

No.	DISTRICTS.	Winter. (1st Jan. to 31st Mar.)								Early Summer. (1st April to 30th June).	
		Steam.		Motor.		Sail.		TOTAL.		Steam.	
		Cwts. Landed.	Value.	Cwts. Landed.	Value.	Cwts. Landed.	Value.	Cwts. Landed.	Value.	Cwts. Landed.	Value.
			£		£		£		£		£
	EAST COAST.										
1	Eyemouth . .	..	..	962	294	56	23	1,018	317	6,842	1,921
2	Leith . .	183	54	14	4	10,279	5,728	10,476	5,786	..	..
3	Anstruther . .	..	..	2,301	963	28,942	11,288	31,243	12,251	5,278	1,597
4	Montrose . .	10	7	1	2	..	..	11	9	1,088	324
5	Stonehaven .	..	..	..	..	..	..	..	..	..	..
6	Aberdeen . .	993	316	..	..	..	..	993	316	49,673	17,610
7	Peterhead . .	2,583	553	..	..	..	..	2,583	553	166,250	60,654
8	Fraserburgh .	553	150	..	..	..	..	553	150	100,965	39,891
9	Banff . . .	305	75	..	..	..	..	305	75	1,422	591
10	Buckie . .	1,109	266	..	..	..	..	1,109	266	1,246	564
11	Findhorn . .	812	226	..	..	58	18	870	244	455	182
12	Cromarty . .	..	..	..	..	..	..	..	..	..	..
13	Helmsdale . .	..	..	..	..	..	..	..	..	..	..
14	Lybster . .	..	..	..	..	..	..	..	..	..	..
15	Wick . . .	41,938	13,736	1,370	553	3,649	1,308	46,957	15,597	30,531	14,118
	East Coast Totals carried down .	48,486	15,383	4,648	1,816	42,984	18,365	96,118	35,564	363,750	137,452
	ORKNEY AND SHETLAND.										
16	Orkney . .	431	76	..	..	..	..	431	76	62,508	34,532
17	Shetland . .	23,835	5,916	503	111	..	..	24,338	6,027	464,041	207,419
	Orkney and Shetland Totals cd. down .	24,266	5,992	503	111	..	..	24,769	6,103	526,549	241,951
	WEST COAST.										
18	Stornoway . .	356,248	85,187	773	187	9,503	2,504	366,524	87,878	34,181	15,129
19	Barra . .	3,549	776	..	..	1,269	259	4,818	1,035	50,807	35,691
20	Loch Broom .	1,282	213	..	..	444	74	1,726	287	..	..
21	Loch Carron&Skye	5,923	1,554	336	75	7,173	1,828	13,432	3,457	487	162
22	Fort-William .	69,581	21,684	141	29	7	2	69,729	21,715	23,884	11,736
23	Campbeltown .	..	..	11,362	3,240	1,872	673	13,234	3,913	..	..
24	Inveraray . .	..	..	..	..	..	..	..	..	..	..
25	Rothesay . .	..	..	1,395	249	42	8	1,437	257	..	..
26	Greenock . .	..	..	560	160	378	39	938	199	..	..
27	Ballantrae . .	213	108	30,287	12,417	2,972	1,807	33,472	14,332	..	..
	West Coast Totals carried down .	436,796	109,522	44,854	16,357	23,660	7,194	505,310	133,073	109,359	62,718
	TOTALS brought down.										
	East Coast . .	48,486	15,383	4,648	1,816	42,984	18,365	96,118	35,564	263,750	137,452
	Orkney & Shetland	24,266	5,992	503	111	..	..	24,769	6,103	526,549	241,951
	West Coast .	436,796	109,522	44,854	16,357	23,660	7,194	505,310	133,073	109,359	62,718
	Foreign Fishing Vessels . .	..	..	..	..	..	..	..	..	..	..
	Grand Tls. for 1913	509,548	130,897	50,005	18,284	66,644	25,559	626,197	174,740	999,658	442,121
	Grand Tls. for 1912	99,493	24,615	45,997	12,660	101,823	26,920	247,313	64,195	1,296,536	395,065
	Increase in 1913 .	410,055	106,282	4,008	5,624	..	..	378,884	110,545	..	47,056
	Decrease in 1913 .	..	..	..	..	35,179	1,361	..	..	296,878	..

APPENDIX B.—

FISH LANDED.—Statement of the Total Quantity and Value of Herrings in **Scotland** during the various

No.	DISTRICTS.	Early Summer—*continued.* (1st April to 30th June).						Great Summer and Autumn. (1st July to 31st Dec.)			
		Motor.		Sail.		Total.		Steam.		Motor.	
		Cwts. Landed.	Value.	Cwts. Landed.	Value.	Cwts. Landed.	Value.	Cwts. Landed.	Value.	Cwts. Landed.	Value.
			£		£		£		£		£
	EAST COAST.										
1	Eyemouth . .	28,334	7,898	7,375	1,806	42,551	11,625	17,265	7,485	42,071	18,679
2	Leith . . .	20	3	261	67	281	70	533	359	..	..
3	Anstruther . .	66	16	836	227	6,180	1,840	12,253	5,101	396	195
4	Montrose . .	129	38	559	164	1,776	526	4,666	2,356	957	420
5	Stonehaven .	..	..	826	218	826	218	..	..	..	..
6	Aberdeen . .	316	110	4,799	1,219	54,788	18,939	192,289	105,865	556	316
7	Peterhead . .	3,150	1,128	78,138	22,541	247,538	84,323	334,715	180,037	3,450	1,786
8	Fraserburgh .	7,312	2,740	71,193	21,555	179,470	64,186	286,223	164,020	13,601	7,595
9	Banff . .	186	62	6,240	1,829	7,848	2,482	6,306	3,334	102	54
10	Buckie . .	..	..	5,222	1,632	6,468	2,196	8,864	4,450	..	..
11	Findhorn . .	..	..	2,757	933	3,212	1,115	4,350	2,441	56	33
12	Cromarty . .	..	..	..	..	..	..	..	..	..	..
13	Helmsdale . .	..	..	175	59	175	59	..	..	..	..
14	Lybster . .	..	..	333	119	333	119	..	..	..	..
15	Wick . . .	5,709	2,588	39,203	16,264	75,443	32,970	155,137	91,333	15,292	9,045
	East Coast Totals carried down .	45,222	14,583	217,917	68,633	626,889	220,668	1,022,601	566,781	76,481	38,123
	ORKNEY AND SHETLAND.										
16	Orkney . .	199	113	21,608	9,887	84,315	44,532	171,338	104,146	1,604	891
17	Shetland . .	1,330	352	48,528	21,661	513,899	229 432	87,572	49,409	227	103
	Orkney and Shetland Totals cd. down .	1,529	465	70,136	31,548	598,214	273,964	258,910	153.555	1,831	994
	WEST COAST.										
18	Stornoway . .	1,579	975	21,054	12,549	56,814	28,653	40,113	20,924	6,791	4,649
19	Barra . .	3,741	2,803	34,006	21,549	88,554	60,043	18,808	14,127	487	327
20	Loch Broom .	..	..	260	66	260	66	..	..	840	337
21	Loch Carron&Skye	690	249	1,604	466	2,781	877	1,982	839	4,810	2,057
22	Fort-William .	1,617	1,012	978	291	26,479	13,039	11,508	6,645	6,630	2,965
23	Campbeltown .	34,723	9,159	971	242	35,694	9,401	11	5	73,744	38,862
24	Inveraray . .	707	209	413	178	1,120	387	..	..	5,751	2,800
25	Rothesay . .	3,434	1,324	84	34	3,518	1,358	..	..	5,638	3,241
26	Greenock . .	2,062	691	84	46	2,146	737	..	..	20,250	6,699
27	Ballantrae . .	2,898	1,072	102	39	3,000	1,111	..	..	15,150	9,485
	West Coast Totals carried down .	51,451	17,494	59,556	35,460	220.366	115,672	72,422	42,540	140,091	71,422
	TOTALS brought down.										
	East Coast .	45,222	14,583	217,917	68,633	626,889	220,668	1,022,601	566,781	76,481	38,123
	Orkney & Shetland	1,529	465	70,136	31,548	598,214	273,964	258,910	153,555	1,831	994
	West Coast .	51,451	17,494	59,556	35,460	220,366	115,672	72,422	42,540	140,091	71,422
	Foreign Fishing Vessels . .	..	..	..	..	..	..	2	1	..	..
	Grand Tls. for 1913	98,202	32,542	347,609	135,641	1,445,469	610,304	1,353,935	762,877	218,403	110,539
	Grand Tls. for 1912	89,053	22,376	716,533	211,376	2.102,122	628,817	1,747,406	792,499	186,714	78,771
	Increase in 1913 .	9,149	10,166	..	..	..	..	..	..	31,689	31,768
	Decrease in 1913 .	..	..	368,924	75,735	656,653	18,513	393,471	29,622	..	..

No. I.—*continued.*

taken by nets from Steam, Motor, and Sailing Boats respectively and landed
Seasons of the Year 1913.

Great Summer and Autumn—*contd.* (1st July to 31st Dec.)				TOTALS.						GRAND TOTAL.		No.
Sail.		TOTAL.		Steam.		Motor.		Sail.				
Cwts. Landed.	Value.	Cwts. Landed.	Value.	Cwts. Landed.	Value.	Cwts. Landed.	Value.	Cwts. Landed.	Value.	Cwts. Landed.	Value.	
	£		£		£		£		£		£	
11,367	4,844	70,703	31,008	24,107	9,406	71,367	26,871	18,798	6,673	114,272	42,950	1
1,236	782	1,769	1,141	716	413	34	7	11,776	6,577	12,526	6,997	2
8,416	3,378	21,065	8,674	17,531	6,698	2,763	1,174	38,194	14,893	58,488	22,765	3
5,427	2,462	11,050	5,238	5,764	2,687	1,087	460	5,986	2,626	12,837	5,773	4
504	252	504	252	..	..	..	..	1,330	470	1,330	470	5
20,541	10,713	213,386	116,894	242,955	123,791	872	426	25,340	11,932	269,167	136,149	6
186,606	95,923	524,771	277,746	503,548	241,244	6,600	2,914	264,744	118,464	774,892	362,622	7
170,586	94,406	470,410	266,021	387,741	204,061	20,913	10,335	241,779	115,961	650,433	330,357	8
5,697	2,755	12,105	6,143	8,033	4,000	288	116	11,937	4,584	20,258	8,700	9
4,339	2,068	13,203	6,518	11,219	5,280	..	..	9,561	3,700	20,780	8,980	10
3,787	1,747	8,193	4,221	5,617	2,849	56	33	6,602	2,698	12,275	5,580	11
194	76	194	76	..	..	..	..	194	76	194	76	12
126	57	126	57	..	..	..	..	301	116	301	116	13
1,638	672	1,638	672	..	..	..	..	1,971	791	1,971	791	14
134,469	75,919	304,898	176,297	227,606	119,187	22,371	12,186	177,321	93,491	427,298	224,864	15
554,933	296,054	1,654,015	900,958	1,434,837	719,616	126,351	54,522	815,834	383,052	2,377,022	1,157,190	
60,706	36,095	233,648	141,132	234,277	138,754	1,803	1,004	82,314	45,982	318,394	185,740	16
83,263	47,153	171,062	96,665	575,448	262,744	2,060	566	131,791	68,814	709,299	332,124	17
143,969	83,248	404,710	237,797	809,725	401,498	3,863	1,570	214,105	114,796	1,027,693	517,864	
54,008	28,662	100,912	54,235	430,542	121,240	9,143	5,811	84,565	43,715	524,250	170,766	18
6,690	3,808	25,985	18,262	73,164	50,594	4,228	3,130	41,965	25,616	119,357	79,340	19
13,863	4,889	14,703	5,226	1,282	213	840	337	14,567	5,029	16,689	5,579	20
17,102	5,916	23,894	8,812	8,392	2,555	5,836	2,381	25,879	8,210	40,107	13,146	21
5,461	2,116	23,599	11,726	104,973	40,065	8,388	4,006	6,446	2,409	119,807	46,480	22
1,195	442	74,950	39,309	11	5	119,829	51,261	4,038	1,357	123,878	52,623	23
3,825	1,861	9,576	4,661	..	..	6,458	3,009	4,238	2,039	10,696	5,048	24
1,546	718	7,184	3,959	..	..	10,467	4,814	1,672	760	12,139	5,574	25
1,097	578	21,347	7,277	..	..	22,872	7,550	1,559	663	24,431	8,213	26
1,630	1,002	16,780	10,487	213	108	48,335	22,974	4,704	2,848	53,252	25,930	27
106,417	49,992	318,930	163,954	618,577	214,780	236,396	105,273	189,633	92,646	1,044,606	412,699	
554,933	296,054	1,654,015	900,958	1,434,837	719,616	126,351	54,522	815,834	383,052	2,377,022	1,157,190	
143,969	83,248	404,710	237,797	809,725	401,498	3,863	1,570	214,105	114,796	1,027,693	517,864	
106,417	49,992	318,930	163,954	618,577	214,780	236,396	105,273	189,633	92,646	1,044,606	412,699	
..	..	2	1	2	1	..	..	..	..	2	1	
805,319	429,294	2,377,657	1,302,710	2,863,141	1,335,895	366,610	161,365	1,219,572	590,494	4,449,323	2,087,754	
917,745	346,251	2,851,865	1,217,521	3,143,435	1,212,179	321,764	113,807	1,736,101	584,547	5,201,300	1,910,533	
..	83,043	..	85,189	..	123,716	44,846	47,558	..	5,947	..	177,221	
112,426	..	474,208	..	280,294	..	..	..	516,529	..	751,977	..	

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Eyemouth** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912 Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		..		324		3,906		4,230		..		..		..		..					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH—																						
Herrings	..	..	..	..	..	..	..	..	..	..	24,107	9,406	71,367	26,871	18,798	6,673	114,272	42,950	114,272	42,950	106,374	31,030
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	871	141	3,822	682	928	155	5,621	978	5,621	978	1,431	527
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	24,978	9,547	75,189	27,553	19,726	6,828	119,893	43,928	119,893	43,928	107,805	31,557
DEMERSAL FISH—																						
Round.																						
Cod	..	..	..	..	146	156	59	61	205	217	..	..	..	..	..	..	..	..	205	217	112	90
Codling	..	..	..	..	287	184	2,020	1,111	2,307	1,295	..	..	..	..	..	..	..	..	2,307	1,295	2,408	1,109
Ling	..	..	..	..	191	193	38	35	229	228	..	..	..	..	..	..	..	..	229	228	82	55
Torsk (Tusk)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saithe (Coal Fish)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Haddocks, ex. La. ,, Large ,, Medium ,, Small	..	..	..	..	137	220	1,372	1,946	1,509	2,166	..	..	..	..	..	..	..	..	1,509	2,166	2,032	2,163

Whitings	..	..	..	..	51	56	672	663	723	719	..	..	..	..	..	..	..	..	723	719	668	553
Conger Eels	..	..	..	..	112	85	11	10	123	95	..	..	..	..	..	..	..	..	123	95	40	21
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	2
Catfish	..	..	..	..	1	1	24	16	25	17	..	..	..	..	..	..	..	..	25	17	41	13
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Round Fish	..	..	..	..	925	895	4,196	3,842	5,121	4.737	..	..	..	..	..	..	..	..	5,121	4,737	5,391	4,006
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	..	..	..	..	17	43	..	.	17	43	..	..	..	..	..	..	..	..	17	43	7	15
Lemon Soles	..	..	..	..	..	..	3	9	3	9	..	..	..	..	..	..	..	..	3	9	4	9
Flounders	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plaice, Large	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
,, Medium	..	..	..	..	..	..	6	10	6	10	..	..	..	..	..	..	..	..	6	10	..	..
,, Small	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	2	3	3	4	5	7	..	..	..	..	..	..	..	..	5	7	..	..
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	..	..	..	..	19	46	12	23	31	69	..	..	..	..	..	..	..	..	31	69	11	24
Skates and Rays	..	..	..	..	202	114	12	7	214	121	..	..	..	..	..	..	..		214	121	60	32
Squids	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	620	70	620	70	620	70	..	..
GRAND TOTALS	..	..	..	..	1,146	1,055	4,220	3,872	5,366	4,927	24,978	9,547	75,189	27,553	20,346	6,898	120,513	43,998	125,879	48,925	113,267	35,619

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
TOTAL VALUE OF ALL FISH	..	..	5,545	257	325,300	1,791	..	..	..	..	79	16	..	2,064	..	2,033
Fish used for Manure													..	**50,989**	..	**37,652**
,, ,, Bait (included above)													..	..	..	..
													874	406	1,030	404

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the district of **Leith** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		..		..		..		..		..		..		..		..					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
PELAGIC FISH—	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
Herrings	535	360	..	..	..	..	..	..	..	..	181	53	34	7	11,776	6,577	11,991	6,637	12,526	6,997	10,968	3,592
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3,493	1,177	3,493	1,177	3,493	1,177	2,504	473
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	134	501	134	501	134	501	215	634
Mackerel	1,108	502	..	..	..	..	..	..	..	..	..	..	..	..	188	139	188	139	1,296	641	963	485
Total of Pelagic Fish	1,643	862	..	..	..	..	..	..	..	..	181	53	34	7	15,591	8,394	15,806	8,454	17,449	9,316	14,650	5,184
DEMERSAL FISH—																						
Round.																						
Cod, Codling	70,045	38,388	2,054	1,513	230	146	10,355	6,659	12,639	8,318	..	..	..	..	567	280	567	280	83,251	46,986	86,664	43,047
Ling	6,769	3,107	328	334	24	15	49	38	401	387	..	..	..	..	..	..	..	..	7,170	3,494	5,636	2,479
Torsk (Tusk)	8	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	1	5	1
Saithe (Coal Fish)	6,552	1,488	219	54	..	..	47	15	266	69	..	..	..	..	..	..	..	..	6,818	1,557	5,435	903
Haddocks, ex. La., Large, Medium, Small	123,317	77,686	..	..	57	59	3,239	3,300	3,296	3,359	..	..	..	..	..	..	..	..	126,613	81,045	153,722	83,909

Whitings	54,157	20,997	..	..	..	..	162	110	162	110	..	..	..	..	..	..	..	..	54,319	21,107	39,438	13,709
Conger Eels	4	..	..	..	..	..	60	45	60	45	..	..	..	..	120	297	120	297	184	342	98	227
Gurnards	1,425	257	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,425	257	1,817	281
Catfish	7,312	3,236	..	..	..	..	317	172	317	172	..	..	..	..	3	3	3	3	7,632	3,411	10,778	4,235
Monks (Anglers)	2,150	958	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,150	958	1,911	690
Hake	135	55	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	135	55	184	73
Total of Round Fish	271,874	146,173	2,601	1,901	311	220	14,229	10,339	17,141	12,460	..	..	..	..	690	580	690	580	289,705	159,213	305,688	149,554
FLAT.																						
Turbot	1,883	4,844	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,883	4,844	2,129	5,236
Halibut	1,431	2,755	67	117	..	..	..	..	67	117	..	..	..	..	..	..	..	..	1,498	2,872	1,281	2,610
Lemon Soles	6,891	14,337	..	..	..	..	13	33	13	33	..	..	..	..	2	4	2	4	6,906	14,374	8,134	15,249
Flounders	820	1,120	..	..	..	..	646	564	646	564	..	..	..	..	666	334	666	334	2,132	2,018	2,156	1,896
Plaice, Large, Medium, Small	8,387	11,792	..	..	..	..	865	754	865	754	..	..	..	..	1,741	1,902	1,741	1,902	10,993	14,448	11,525	13,398
Brill	18	45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	45	32	79
Dabs	4,845	1,453	..	..	..	..	160	133	160	133	..	..	..	..	42	32	42	32	5,047	1,618	5,177	1,448
Whitches	3,066	4,052	..	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	3,067	4,053	2,214	2,588
Megrims	2,109	2,027	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,109	2,027	1,405	1,250
Total of Flat Fish	29,450	42,425	67	117	..	..	1,685	1,485	1,752	1,602	..	..	..	..	2,451	2,272	2,451	2,272	33,653	46,299	34,053	43,754
Skates and Rays	4,414	1,149	236	133	10	6	128	84	374	223	..	..	..	..	75	47	75	47	4,863	1,419	4,777	1,219
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	566	211	..	..	..	..	136	91	136	91	..	..	..	..	..	..	..	..	702	302	545	182
GRAND TOTALS	307,947	190,820	2,904	2,151	321	226	16,178	11,999	19,403	14,376	181	53	34	7	18,807	11,293	19,022	11,353	346,372	216,549	359,713	199,893

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
TOTAL VALUE OF ALL FISH	..	..	17,850	899	499,150	2,638	1840	184	6,783	1,016	3,433	552	..	5,289	..	4,931
Fish used for Manure													..	**221,838**	..	**204,824**
" " Bait (included above)													1,933	87	2,756	157
													8,623	1,200	10,587	1,463

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Anstruther** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		31		1,005		6,506		7,542		368		234		6,533		7,135					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
PELAGIC FISH—	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
Herrings	..	..	..	..	..	..	..	..	..	..	17,531	6,698	2,763	1,174	38,194	14,893	58,488	22,765	58,488	22,765	77,165	24,772
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	898	57	898	57	898	57	25	6
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	123	246	123	246	123	246	143	286
Mackerel	..	..	..	..	..	..	2	1	2	1	83	25	3	1	47	14	133	40	135	41	48	14
Total of Pelagic Fish	..	..	..	..	..	..	2	1	2	1	17,614	6,723	2,766	1,175	39,262	15,210	59,642	23,108	59,644	23,109	77,381	25,078
DEMERSAL FISH—																						
Round.																						
Cod, Codling	..	..	165	92	1,910	1,425	7,092	4,177	9,167	5,694	..	..	..	..	858	344	858	344	10,025	6,038	11,394	5,407
Ling	..	..	31	23	1	1	10	7	42	31	..	..	..	..	..	..	..	..	42	31	64	34
Torsk (Tusk)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saithe (Coal Fish)	..	..	60	11	3	1	69	18	132	30	..	..	..	..	..	..	..	..	132	30	843	120
Haddocks, ex. La.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
„ Large, „ Medium, „ Small	..	..	..	..	1,215	1,332	2,320	2,414	3,535	3,746	..	..	..	..	..	..	..	..	3,535	3,746	4,263	3,686

Whitings	..	..	..	..	15	8	6	3	21	11	..	..	..	..	..	..	..	..	21	11	323	165
Conger Eels	..	..	..	..	32	18	34	30	66	48	..	..	..	..	..	..	..	..	66	48	134	69
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	10	5	7	2	17	7	..	..	..	..	..	..	..	..	17	7	104	22
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Round Fish	..	..	256	126	3,186	2,790	9,538	6,651	12,980	9,567	..	..	..	..	858	344	858	344	13,838	9,911	17,125	9,503
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	..	..	4	11	..	..	2	7	6	18	..	..	..	..	..	..	..	..	6	18	19	35
Lemon Soles	..	..	..	..	8	18	7	17	15	35	..	..	..	..	..	..	..	..	15	35	4	8
Flounders	..	..	..	..	..	..	..	..	..	..	..	..	..	..	83	83	83	83	83	83	59	59
Plaice, Large, Medium, Small	..	..	..	..	37	53	918	889	955	942	..	..	..	..	1,148	942	1,148	942	2,103	1,884	2,678	2,052
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	5	4	37	26	42	30	..	..	..	..	..	..	..	..	42	30	126	88
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	..	..	4	11	50	75	964	939	1,018	1,025	..	..	..	..	1,231	1,025	1,231	1,025	2,249	2,050	2,886	2,242
Skates and Rays	..	..	17	8	12	6	26	20	55	34	..	..	..	..	..	..	..	..	55	34	113	43
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
GRAND TOTALS	..	..	277	145	3,248	2,871	10,530	7,611	14,055	10,627	17,614	6,723	2,766	1,175	41,351	16,579	61,731	24,477	75,786	35,104	97,505	36,866

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	..	..	19,694	810	265,410	2,014	15,973	781	..	..	1311	252	..	3,857	..	3,523
TOTAL VALUE OF ALL FISH													..	**38,961**	..	**40,389**
Fish used for Manure													840	42	..	..
" " Bait (included above)													475	174	261	67

APPENDIX B. No. II.—RETURN respecting Vessels arriving and Fish landed in the District of **Montrose** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing.	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	962		39		4,877		7,987		12,903		114		47		728		889					
Aggregate No. of Days absent from Port . . .	2,865		..		..		..		..		..	..	..	..	..	..	..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH—																						
Herrings . .	18	28	..	..	..	..	..	..	..	..	5,746	2,659	1,087	460	5,986	2,626	12,819	5,745	12,837	5,773	28,846	9,584
Sprats . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,554	217	2,554	217	2,554	217	322	23
Sparlings . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	40	16	40	16	40	24	64
Mackerel . .	53	45	..	..	..	..	..	..	..	..	151	34	74	23	463	105	688	162	741	207	350	173
Total of Pelagic Fish	71	73	..	..	..	..	..	..	..	..	5,897	2,693	1,161	483	9,019	2,988	16,077	6,164	16,148	6,237	29.542	9,844
DEMERSAL FISH—																						
ROUND.																						
Cod . . .	3,774	4,083	672	575	..	..	..	..	672	575	..	..	..	..	..	..	..	..	21,984	15,424	24.019	13,073
Codling . . .	4,996	2,959	..	..	6,600	4,262	5,930	3,538	12,530	7,800	..	..	..	..	12	7	12	7				
Ling . . .	517	604	159	177	26	32	2	2	187	211	..	..	..	..	..	..	..	..	704	815	353	343
Torsk (Tusk) .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saithe (Coal Fish) .	376	88	74	15	5	1	81	24	160	40	..	..	..	..	..	..	..	..	536	128	462	83
Haddocks, ex. La. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..				
,, Large .	3,391	3,181	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	31,381	23,660	44,444	26.651
,, Medium.	2,995	2,470	..	..	4,484	5,283	2,534	2,993	7,018	8276	..	..	..	..	..	..	..	..				
,, Small	17,977	9,733	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..				

Whitings	8,905	3,411	..	..	1,416	807	251	148	1,667	955	..	..	..	..	..	..	..	..	10,572	4,366	6,644	2,553
Conger Eels	..	..	..	..	11	12	25	23	36	35	..	..	..	..	..	..	..	..	36	35	22	11
Gurnards	483	95	..	..	33	10	..	..	33	10	..	..	..	..	..	..	..	..	516	105	470	102
Catfish	576	340	..	..	161	73	112	55	273	128	..	..	..	..	..	..	..	..	849	468	746	303
Monks (Anglers)	380	244	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	380	244	395	168
Hake	55	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	55	27	10	5
Total of Round Fish	44,425	27,235	905	767	12,736	10,480	8,935	6,783	22,576	18,030	..	..	..	..	12	7	12	7	67,013	45,272	77,565	43,292
FLAT.																						
Turbot	89	403	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	89	403	88	425
Halibut	41	156	40	130	4	10	3	6	47	146	..	..	..	..	..	..	..	..	88	302	93	265
Lemon Soles	2,147	4,653	..	..	3	9	11	8	14	17	..	..	..	..	..	..	..	..	2,161	4,670	1,860	3,519
Flounders	..	..	..	..	..	..	65	37	65	37	..	..	..	..	..	..	..	..	65	37	11	9
Plaice, Large	32	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..				
,, Medium	883	1,681	..	..	6	8	625	528	631	536	..	..	..	..	12	9	12	9	2,689	3,390	3,001	3,012
,, Small	1,131	1,118	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..				
Brill	4	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	7	4	8
Dabs	1,013	397	..	..	82	54	474	266	556	320	..	..	..	..	..	..	..	..	1,569	717	1,542	650
Whitches	448	600	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	448	600	290	354
Megrims	425	429	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	425	429	218	142
Total of Flat Fish	6,213	9,490	40	130	95	81	1,178	845	1,313	1,056	..	..	..	..	12	9	12	9	7,538	10,555	7,107	8,384
Skates and Rays	795	352	142	95	8	5	10	3	160	103	..	..	..	..	..	..	..	..	955	455	1,220	316
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	1	1	..	..	..	..	4	4	4	4	..	..	..	..	..	..	..	..	5	5	19	11
GRAND TOTALS	51,505	37,151	1,087	992	12,839	10,566	10,127	7,635	24,053	19,193	5,897	2,693	1,161	483	9,043	3,004	16,101	6,180	91,659	62,524	115,453	61,847

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	..	..	13,489	667	250,002	1,722	39,357	1,947	12	4	2,226	338	..	4,678	..	5,172
TOTAL VALUE OF ALL FISH													..	**67,202**	..	**67,019**
Fish used for Manure													245	..	..	..
,, ,, Bait (included above)													36	..	..	..

APPENDIX B. No. II.—RETURN respecting Vessels arriving and Fish landed in the District of **Stonehaven** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		..		193		4,111		4,304		..		..		72		72					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
PELAGIC FISH—	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
Herrings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,330	470	1,330	470	1,330	470	9,090	2,560
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	54	15
Total of Pelagic Fish.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,330	470	1,330	470	1,330	470	9,144	2,575
DEMERSAL FISH— ROUND.																						
Cod	..	..	..	..	9	5	168	68	177	73	..	..	..	..	..	..	..	..	177	73	289	101
Codling	..	..	..	..	148	89	1,715	941	1,863	1,030	..	..	..	..	..	..	..	..	1,863	1,030	4,445	1,804
Ling	..	..	..	..	2	1	23	13	25	14	..	..	..	..	..	..	..	..	25	14	23	13
Torsk (Tusk)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saithe (Coal Fish)	..	..	..	..	..	..	56	17	56	17	..	..	..	..	..	..	..	..	56	17	110	33
Haddocks, ex. La.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
,, Large	..	..	..	..	..	..	11	15	11	15	..	..	..	..	..	..	..	..	11	15	85	44
,, Medium	..	..	..	..	208	221	1,112	1,092	1,320	1,313	..	..	..	..	..	..	..	..	1,320	1,313	3,412	2,276
,, Small	..	..	..	..	21	15	46	30	67	45	..	..	..	..	..	..	..	..	67	45	346	170

Whitings	..	..	..	..	230	128	906	456	1,136	584	..	..	..	..	..	..	..	..	1,136	584	1,735	812
Conger Eels	..	..	..	..	..	..	52	24	52	24	..	..	..	..	..	..	..	..	52	24	..	..
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Round Fish	..	..	..	..	618	459	4,089	2,656	4,707	3,115	..	..	..	..	..	..	..	..	4,707	3,115	10,445	5,253
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	..	..	..	..	8	8	5	5	13	13	..	..	..	..	..	..	..	..	13	13	17	17
Lemon Soles	..	..	..	..	4	4	16	16	20	20	..	..	..	..	..	..	..	..	20	20	25	25
Flounders	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plaice, Large, ,, Medium, ,, Small	..	..	..	..	..	..	61	57	61	57	..	..	..	..	..	..	..	..	61	57	45	45
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	140	70	140	70	..	..	..	..	..	..	..	..	140	70	128	64
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	..	..	..	..	12	12	222	148	234	160	..	..	..	..	..	..	..	..	234	160	215	151
Skates and Rays	..	..	..	..	..	..	64	16	64	16	..	..	..	..	..	..	..	..	64	16	129	25
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
GRAND TOTALS	..	..	..	..	630	471	4,375	2,820	5,005	3,291	..	..	..	..	1,330	470	1,330	470	6,335	3,761	19,933	8,004

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	..	..	2,437	155	136,774	1,360	..	..	..	..	35	4	..	1,519	..	1,287
TOTAL VALUE OF ALL FISH													..	5,280	..	9,291
Fish used for Manure													..	..	..	..
,, ,, Bait (included above)													..	..	..	..

APPENDIX B.—No. II.—RETURN respecting Vessels arriving and Fish landed in the District of **Aberdeen** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	10,599		1,145		5		3,099		4,249		3,331		21		410		3,762					
Aggregate No. of Days absent from Port	58,594		10,333		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH—																						
Herrings	11,551	6,239	..	..	..	..	..	..	..	..	231,404	117,552	872	426	25,340	11,932	257,616	129,910	269,167	136,149	222,419	79,247
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	4,052	1,700	..	..	..	..	..	..	..	..	3,426	414	14	2	161	19	3,601	435	7,653	2,135	4,156	1,855
Total of Pelagic Fish	15,603	7,939	..	..	..	..	..	..	..	..	234,830	117,966	886	428	25,501	11,951	261,217	130,345	276,820	138,284	226,575	81,102
DEMERSAL FISH—																						
ROUND.																						
Cod	268,227	164,396	32,815	17,508	40	22	415	286	33,270	17,816	110	42	..	..	..	..	110	42	301,607	182,254	297,592	157,452
Codling	263,436	134,284	3,923	1,994	..	..	1,027	639	4,950	2,633	..	..	..	..	..	..	..	..	268,386	136,917	251,265	114,523
Ling	79,404	24,078	91,733	37,648	20	9	27	17	91,780	37,674	..	..	..	..	..	..	..	..	171,184	61,752	129,795	39,330
Torsk (Tusk)	2,319	751	11,804	4,946	..	..	..	..	11,804	4,946	..	..	..	..	..	..	..	..	14,123	5,697	12,121	4,309
Saithe (Coal Fish)	237,545	40,211	2,050	360	13	2	218	55	2,281	417	..	..	..	..	..	..	..	..	239,826	40,628	150,913	23,051
Haddocks, ex. La.	25,844	13,574	298	160	..	..	..	..	298	160	..	..	..	..	..	..	..	..	26,142	13,734	25,464	13,405
,, Large	142,167	164,085	..	..	..	..	218	218	218	218	..	..	..	..	..	..	..	..	142,385	164,303	169,276	166,653
,, Medium	76,872	79,083	..	..	..	..	1,635	1,428	1,635	1,428	..	..	..	..	..	..	..	..	78,507	80,511	106,517	81,295
,, Small	178,331	107,764	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	178,331	107,764	267,208	113,222

Whitings	146,129	72,492	..	..	..	..	1,882	1,077	1,882	1,077	..	..	..	..	..	..	..	..	148,011	73,569	112,255	46,701
Conger Eels	641	244	706	326	..	..	..	..	706	326	..	..	..	..	..	..	..	..	1,347	570	2,144	746
Gurnards	3,619	416	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3,619	416	3,835	369
Catfish	17,516	3,574	167	29	..	..	..	..	167	29	..	..	..	..	..	..	..	..	17,683	3,603	14,371	2,688
Monks (Anglers)	21,971	5,397	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21,971	5,397	19,922	4,548
Hake	17,230	14,120	110	88	..	..	..	..	110	88	..	..	..	..	..	..	..	..	17,340	14,208	18,300	11,164
Total of Round Fish	1,481,251	824,469	143,606	63,059	73	33	5,422	3,720	149,101	66,812	110	42	..	..	..	..	110	42	1,630,462	891,323	1,580,978	779,456
FLAT.																						
Turbot	1,701	7,046	6	14	..	..	..	..	6	14	..	..	..	..	..	..	..	..	1,707	7,060	1,687	7,883
Halibut	10,574	27,700	30,772	72,254	1	4	3	5	30,776	72,263	..	..	..	..	..	..	..	..	41,350	99,963	41,795	96,037
Lemon Soles	26,229	61,400	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26,229	61,400	29,291	62,064
Flounders	8	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	5	..	..
Plaice, Large	894	1,566	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	894	1,566	940	1,366
,, Medium	12,525	29,546	..	..	..	..	193	491	193	491	1	1	..	..	..	..	1	1	12,719	30,038	14,199	30,773
,, Small	3,818	5,337	..	..	..	..	191	387	191	387	..	..	..	..	..	..	..	..	4,009	5,724	4,932	5,413
Brill	174	347	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	174	347	203	436
Dabs	2,029	932	..	..	..	..	186	124	186	124	..	..	..	..	..	..	..	..	2,215	1,056	2,178	980
Whitches	24,782	23,301	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24,782	23,301	14,971	15,635
Megrims	15,621	19,612	19	13	..	..	..	..	19	13	..	..	..	..	..	..	..	..	15,640	19,625	15,372	16,818
Total of Flat Fish	98,355	176,792	30,797	72,281	1	4	573	1,007	31,371	73,292	1	1	..	..	..	..	1	1	129,727	250,085	125,568	237,405
Skates and Rays	55,897	12,918	50,360	13,704	33	11	59	21	50,452	13,736	..	..	..	..	..	..	..	..	106,349	26,654	101,889	26,122
Squids	28	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	28	3	157	57
Unclassified kinds	8,506	891	60	6	..	..	..	..	60	6	..	..	..	..	..	..	..	..	8,566	897	1,901	230
GRAND TOTALS	1,659,640	1,023,012	224,823	149,050	107	48	6,054	4,748	230,984	153,846	234,941	118,009	886	428	25,501	11,951	261,328	130,388	2,151,952	1,307,246	2,037,068	1,124,372

SHELL FISH.

	Oysters.		Lobsters.		Crabs.		Mussels.		Clams.		Unclassified.					
	No.	£	No.	£	No.	£	Cwts.	£	Cwts.	£	Cwts.	£				
	..	..	389	25	20,030	184	..	..	58	4	24	2	..	215	..	230
TOTAL VALUE OF ALL FISH													..	**1,307,461**	..	**1,124,602**
Fish used for Manure													2,231	126	2,949	253
,, ,, Bait (included above)													28	3	166	58

APPENDIX B.—No. II.—RETURN respecting Vessels arriving and Fish landed in the District of **Peterhead** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		121		..		4,967		5,088		7,294		117		5,018		12,429					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH—																						
Herrings	..	..	..	..	..	..	..	..	..	..	503,548	241,244	6,600	2,914	264,744	118,464	774,892	362,622	774,892	362,622	690,368	236,815
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	6,674	699	145	24	4,798	518	11,617	1,241	11,617	1,241	2,955	505
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	510,222	241,943	6,745	2,938	269,542	118,982	786,509	363,863	786,509	363,863	693,323	237,320
DEMERSAL FISH—																						
ROUND.																						
Cod, Codling	..	..	3,695	1,177	..	..	6,096	2,647	9,791	3,824	..	..	..	..	..	..	..	..	9,791	3,824	14,781	5,390
Ling	..	..	395	138	..	..	301	111	696	249	..	..	..	..	..	..	..	..	696	249	1,235	396
Torsk (Tusk)	..	..	19	7	..	..	..	..	19	7	..	..	..	..	..	..	..	..	19	7	40	15
Saithe (Coal Fish)	..	..	3,695	707	..	..	2,444	513	6,139	1,220	..	..	..	..	..	..	..	..	6,139	1,220	8,740	1,557
Haddocks, ex. La., Large, Medium, Small	..	..	..	..	..	..	869	638	869	638	..	..	..	..	..	..	..	..	869	638	1,944	1,229

Whitings	..	..	..	..	..	..	411	165	411	165	70	20	...	..	60	18	130	38	541	203	527	192
Conger Eels	..	..	2	1	..	..	6	3	8	4	..	..	..	..	..	..	..	..	8	4	57	23
Gurnards	..	..	..	..	..	..	10	3	10	3	..	..	..	..	..	..	..	..	10	3	20	5
Catfish	..	..	..	..	..	..	19	6	19	6	..	..	..	..	..	..	..	..	19	6	63	21
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	3
Total of Round Fish	..	..	7,806	2,030	..	..	10,156	4,086	17,962	6,116	70	20	..	..	60	18	130	38	18,092	6,154	27,411	8.831
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	..	..	109	231	..	..	18	36	127	267	..	..	..	..	..	..	..	..	127	267	119	229
Lemon Soles	..	..	..	..	..	..	8	15	8	15	..	..	..	..	..	..	..	..	8	15	23	46
Flounders	..	..	..	..	..	..	188	98	188	98	..	..	..	..	..	..	..	..	188	98	291	149
Plaice, Large, „ Medium, „ Small	..	..	..	..	..	..	406	650	406	650	..	..	..	..	..	..	..	..	406	650	479	630
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	336	224	336	224	..	..	..	..	..	..	..	..	336	224	422	230
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	..	..	109	231	..	..	956	1,023	1,065	1,254	..	..	..	..	..	..	..	..	1,065	1,254	1,334	1,284
Skates and Rays	..	..	198	57	..	..	8	2	206	59	..	..	..	..	..	..	..	..	206	59	516	142
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	13	3	13	3	..	..	..	..	..	..	..	..	13	3	..	..
GRAND TOTALS	..	..	8,113	2,318	..	..	11,133	5,114	19,246	7,432	510,292	241,963	6,745	2,938	269,602	119,000	786,639	363,901	805,885	371,333	722,584	247,577

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	..	..	76	4	15,705	129	216	15	..	..	..	..	..	148	..	152
TOTAL VALUE OF ALL FISH													..	371,481	..	247,729
Fish used for Manure													..	..	..	..
„ „ Bait (included above)													2,875	1,417	3,448	1,213

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Fraserburgh** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	15		11		78		5,840		5,929		6,475		486		9,627		16,588					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH—																						
Herrings	..	..	..	..	..	..	..	..	..	..	387,741	204,061	20,913	10,335	241,779	115,961	650,433	330,357	650,433	330,357	700,995	249,633
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	8,015	320	480	20	4,723	209	13,218	549	13,218	549	2,333	403
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	395,756	204,381	21,393	10,355	246,502	116,170	663,651	330,906	663,651	330,906	703,328	250,036
DEMERSAL FISH—																						
Round.																						
Cod, Codling	91	50	71	24	216	137	9,003	3,716	9,290	3,877	..	..	..	..	993	536	993	536	10,374	4,463	12,644	4,363
Ling	..	..	285	126	98	49	982	463	1,365	638	..	..	..	..	..	..	..	..	1,365	638	1,022	407
Torsk (Tusk)	..	..	..	..	..	..	26	9	26	9	..	..	..	..	..	..	..	..	26	9	6	3
Saithe (Coal Fish)	..	..	19	5	7	2	2,047	382	2,073	389	..	..	..	..	..	..	..	..	2,073	389	2,908	487
Haddocks, ex. La. ,, Large ,, Medium ,, Small	166	122	..	..	72	73	1,667	1,354	1,739	1,427	..	..	..	..	..	..	..	..	1,905	1,549	4,551	2,831

Whitings	5	3	..	..	4	2	189	92	193	94	..	..	..	..	..	..	..	..	198	97	507	193
Conger Eels	..	..	..	..	41	21	477	256	518	277	..	..	..	..	..	..	..	..	518	277	393	152
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	5	1	37	9	42	10	..	..	..	..	..	..	..	..	42	10	50	17
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Round Fish	262	175	375	155	443	285	14,428	6,281	15,246	6,721	..	..	..	..	993	536	993	536	16,501	7,432	22,081	8,453
FLAT.																						
Turbot	..	..	..	..	..	..	2	7	2	7	..	..	..	..	..	..	..	..	2	7	2	5
Halibut	..	..	44	106	11	38	109	347	164	491	..	..	..	..	..	..	..	..	164	491	201	409
Lemon Soles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2
Flounders	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plaice, Large, Medium, Small	8	18	..	..	..	..	37	75	37	75	..	..	..	..	..	..	..	..	45	93	57	85
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	3	3	88	84	91	87	..	..	..	..	..	..	..	..	91	87	79	62
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	8	18	44	106	14	41	236	513	294	660	..	..	..	..	..	..	..	..	302	678	340	563
Skates and Rays	..	..	162	60	53	26	399	186	614	272	..	..	..	..	..	..	..	..	614	272	1,079	466
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	20	8	20	8	..	..	..	..	..	..	..	..	20	8	..	..
GRAND TOTALS	270	193	581	321	510	352	15,083	6,988	16,174	7,661	395,756	204,381	21,393	10,355	247,495	116,706	664,644	331,442	681,088	339,296	726,828	259,518

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	..	..	4,893	267	137,070	1,136	..	..	..	..	907	227	..	1,630	..	1,599
TOTAL VALUE OF ALL FISH													..	**340,926**	..	**261,117**
Fish used for Manure													..	..	..	..
" " Bait (included above)													..	..	..	..

APPENDIX B. No. II.—Return respecting Vessels arriving and Fish landed in the District of **Banff** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		..		1,030		3,401		4,431		295		558		3,318		4,171					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
PELAGIC FISH—	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
Herrings	..	..	..	..	..	..	..	..	..	..	8,033	4,000	288	116	11,937	4,584	20,258	8,700	20,258	8,700	26,171	8,608
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	..	..	95	12	95	12	95	12	175	28
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	8,033	4,000	288	116	12,032	4,596	20,353	8,712	20,353	8,712	26,346	8,636
DEMERSAL FISH—																						
ROUND.																						
Cod	..	..	..	..	..	..	148	85	148	85	..	..	923	427	6,593	3,133	7,516	3,560	7,664	3,645	11,485	3,735
Codling	..	..	..	..	474	255	1,660	948	2,134	1,203	..	..	..	..	..	..	..	..	2,134	1,203	4,496	1,723
Ling	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27	11
Torsk (Tusk)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saithe (Coal Fish)	..	..	..	..	..	..	159	41	159	41	..	..	..	..	..	..	..	..	159	41	8	2
Haddocks, ex. La.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
,, Large	..	..	..	..	1,674	1,795	5,156	4,788	6,830	6,583	..	..	..	..	..	..	..	..	6,830	6,583	10,653	7,660
,, Medium	..	..	..	..	264	227	311	232	575	459	..	..	..	..	..	..	..	..	575	459	4,376	2,534
,, Small	..	..	..	..	..	..	436	242	436	242	..	..	..	..	..	..	..	..	436	242	2,339	1,033

Whitings	..	..	..	..	351	182	1,359	813	1,710	995	..	..	..	..	..	..	..	..	1,710	995	3,562	1,335
Conger Eels	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Round Fish	..	..	..	..	2,763	2,459	9,229	7,149	11,992	9,608	..	..	923	427	6,593	3,133	7,516	3,560	19,508	13,168	36,950	18,035
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	6
Lemon Soles	..	..	..	..	..	..	..	..	..	..	..	..	112	407	348	1,283	460	1,690	460	1,690	355	1,103
Flounders	..	..	..	..	21	18	148	121	169	139	..	..	..	..	..	..	..	..	169	139	54	36
Plaice, Large, „ Medium, „ Small	..	..	..	..	..	..	..	..	..	..	..	..	40	94	269	663	309	757	309	757	87	241
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	..	..	..	..	21	18	148	121	169	139	..	..	152	501	617	1,946	769	2,447	938	2,586	500	1,386
Skates and Rays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	28	8
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
GRAND TOTALS	..	..	..	..	2,784	2,477	9,377	7,270	12,161	9,747	8,033	4,000	1,363	1,044	19,242	9,675	28,638	14,719	40,799	24,466	63,824	28,065

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	..	..	..	..	67,100	342	..	..	..	..	50	12	..	354	..	587
TOTAL VALUE OF ALL FISH													..	**24,820**	..	**28,652**
Fish used for Manure													..	..	..	..
„ „ Bait (included above)													..	..	..	..

APPENDIX B.—No II.—RETURN respecting Vessels arriving and Fish landed in the District of **Buckie** during the Year 1913, and showing the catch and value during the previous Year

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	1		1		..		4,146		4,147		785		12		1,970		2,767					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH—																						
Herrings	..	..	..	.	..	..	..	..	..	..	11,219	5,280	..	..	9,561	3,700	20,780	8,980	20,780	8,980	40,745	12,732
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	1,842	29	..	..	..	..	1,842	29	1,842	29	20	3
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	13,061	5,309	..	..	9,561	3,700	22,622	9,009	22,622	9,009	40,765	12,735
DEMERSAL FISH—																						
ROUND.																						
Cod	..	..	..	..	..	..	..	..	..	..	480	233	131	75	22,246	9,544	22,857	9,852	22,857	9,852	23,989	8,914
Codling	..	..	..	..	..	..	3,192	1,465	3,192	1,465	..	..	..	..	..	..	..	..	3,192	1,465	..	..
Ling	..	..	5	3	..	..	2	1	7	4	..	..	..	..	..	..	..	..	7	4	115	65
Torsk (Tusk)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saithe (Coal Fish)	..	..	..	..	..	..	52	14	52	14	..	..	..	..	9	3	9	3	61	17	64	13
Haddocks, ex. La.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" Large	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" Medium	26	7	..	..	..	..	9,145	7,272	9,145	7,272	..	..	..	..	..	..	..	..	9,171	7,279	13,175	8,674
" Small	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Whitings	..	..	..	..	..	..	4	3	4	3	..	..	..	..	..	..	..	..	4	3	37	1
Conger Eels	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	7
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Round Fish	26	7	5	3	..	..	12,395	8,755	12,400	8,758	480	233	131	75	22,255	9,547	22,866	9,855	35,292	18,620	37,394	17,684
FLAT.																						
Turbot	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..
Halibut	1	1	..	..	..	..	3	5	3	5	..	..	..	..	5	9	5	9	9	15	69	112
Lemon Soles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Flounders	..	..	..	..	..	..	95	86	95	86	..	..	..	..	4	4	4	4	99	90	129	116
Plaice, Large	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
,, Medium	..	..	..	..	..	..	8	8	8	8	..	..	..	..	..	..	..	..	8	8	24	24
,, Small	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	2	3	..	..	..	..	106	99	106	99	..	..	..	..	9	13	9	13	117	115	222	252
Skates and Rays	..	..	..	..	..	..	4	2	4	2	..	..	..	..	8	4	8	4	12	6	199	131
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
GRAND TOTALS	28	10	5	3	..	..	12,505	8,856	12,510	8,859	13,541	5,542	131	75	31,833	13,264	45,505	18,881	58,043	27,750	78,580	30,802

SHELL FISH.

	Oysters.		Lobsters.		Crabs.		Mussels.		Clams.		Unclassified.					
	No.	£	No.	£	No.	£	Cwts.	£	Cwts.	£	Cwts.	£				
	..	..	1,213	59	1,100	13	..	..	..	..	..	..	..	72	..	39
TOTAL VALUE OF ALL FISH													..	27,822	..	30,841
Fish used for Manure													..	..	..	..
,, ,, Bait (included above)													..	..	..	..

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Findhorn** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		..		..		5,530		5,530		781		7		1,875		2,663					
Aggregate No. of Days absent from Port	..		..		..		5,530		5,530		875		9		2,374		3,258					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH—																						
Herrings	..	..	..	..	..	..	..	..	..	..	5,617	2,849	56	33	6,602	2,698	12,275	5,580	12,275	5,580	39,900	8,766
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,172	321	1,172	321	1,172	321	2,746	1,364
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	5,617	2,849	56	33	7,774	3,019	13,447	5,901	13,447	5,901	42,646	10,130
DEMERSAL FISH—																						
Round.																						
Cod	..	..	..	..	..	..	..	..	..	..	8,170	4,337	88	53	12,065	6,073	20,323	10,463	20,323	10,463	28,562	11,461
Codling	..	..	..	..	..	..	937	465	937	465	..	..	..	..	..	..	..	..	937	465	1,362	584
Ling	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	2
Torsk (Tusk)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saithe (Coal Fish)	..	..	..	..	..	..	38	6	38	6	..	..	..	..	..	..	..	..	38	6	5	1
Haddocks, ex. La.																						..
„ Large																						
„ Medium	..	..	..	..	..	..	6,870	5,979	6,870	5,979	..	..	..	..	..	..	..	..	6,870	5,979	15,034	9,527
„ Small																						..

Whitings	..	..	..	..	..	..	1,406	851	1,406	851	..	..	..	..	..	..	..	..	1,406	851	951	380
Conger Eels	..	..	..	..	..	..	2	1	2	1	..	..	..	..	..	..	..	..	2	1	..	..
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	..	..	3	1	3	1	..	..	..	..	..	..	..	..	3	1	3	1
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Round Fish	..	..	..	..	..	..	9,256	7,303	9,256	7,303	8,170	4,337	88	53	12,065	6,073	20,323	10,463	29,579	17,766	45,923	21,956
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	..	..	..	..	..	..	3	6	3	6	..	..	..	..	..	..	..	..	3	6	..	..
Lemon Soles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Flounders	..	..	..	..	..	..	531	485	531	485	..	..	..	..	..	..	..	..	531	485	270	230
Plaice, Large, ,, Medium, ,, Small	..	..	..	..	..	..	1,737	1,728	1,737	1,728	..	..	..	..	..	..	..	..	1,737	1,728	2,060	2,026
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	4	3	4	3	..	..	..	..	..	..	..	..	4	3	..	..
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	..	..	..	..	..	..	2,275	2,222	2,275	2,222	..	..	..	..	..	..	..	..	2,275	2,222	2,330	2,256
Skates and Rays	..	..	..	..	..	..	37	15	37	15	..	..	..	..	..	..	..	..	37	15	186	57
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1
GRAND TOTALS	..	..	..	..	..	..	11,568	9,540	11,568	9,540	13,787	7,186	144	86	19,839	9,092	33,770	16,364	45,338	25,904	91,087	34,400

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	..	..	320	25	1,600	9	4,170	209	..	..	..	..	..	243	..	243
TOTAL VALUE OF ALL FISH													..	**26,147**	..	**34,643**
Fish used for Manure													..	..	..	..
,, ,, Bait (included above)													..	..	..	..

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Cromarty** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								**1913.** Total Quantity and Value.		**1912.** Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor		Sail.		Total.					
No. of Vessels arriving	..		..		..		4,711		4,711		..		..		61		61					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
PELAGIC FISH—	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
Herrings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	194	76	194	76	194	76	174	39
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	194	76	194	76	194	76	174	39
DEMERSAL FISH—																						
Round.																						
Cod, Codling	..	..	..	..	..	..	3,125	1,737	3,125	1,737	..	..	..	..	170	52	170	52	3,295	1,789	5,602	2,377
Ling	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Torsk (Tusk)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saithe (Coal Fish)	..	..	..	..	..	..	10	5	10	5	..	..	..	..	..	..	..	..	10	5	10	4
Haddocks, ex. La., Large, Medium, Small	..	..	..	..	..	..	6,206	4,048	6,206	4,048	..	..	..	..	..	..	..	..	6,206	4,048	10,776	5,885

Whitings	..	..	..	..	..	..	248	137	248	137	..	..	..	..	..	..	..	..	248	137	505	253
Conger Eels	..	..	..	..	..	..	22	8	22	8	..	..	..	..	..	..	..	..	22	8	2	1
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Round Fish	..	..	..	..	..	..	9,611	5,935	9,611	5,935	..	..	..	..	170	52	170	52	9,781	5,987	16,895	8,520
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	..	..	..	..	..	..	7	9	7	9	..	..	..	..	..	..	..	..	7	9	..	..
Lemon Soles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Flounders	..	..	..	..	..	..	381	196	381	196	..	..	..	..	..	..	..	..	381	196	346	163
Plaice, Large, Medium, Small	..	..	..	..	..	..	1,483	1,290	1,483	1,290	..	..	..	..	..	..	..	..	1,483	1,290	1,377	974
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	60	36	60	36	..	..	..	..	..	..	..	..	60	36	39	22
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Total of Flat Fish	..	..	..	..	..	..	1,931	1,531	1,931	1,531	..	..	..	..	..	..	..	..	1,931	1,531	1,762	1,159
Skates and Rays	..	..	..	..	..	..	17	4	17	4	..	..	..	..	..	..	..	..	17	4	15	4
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	30	3	30	3	..	..	..	..	..	..	..	..	30	3	..	..
GRAND TOTALS	..	..	..	..	..	..	11,589	7,473	11,589	7,473	..	..	..	..	364	128	364	128	11,953	7,601	18,846	9,722

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	..	..	700	28	11,000	36	1,980	121	..	..	1,603	283	..	468	..	599
TOTAL VALUE OF ALL FISH													..	**8,069**	..	**10 321**
Fish used for Manure													..	..	..	..
" " Bait (included above)													1,980	121	3,675	233

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Helmsdale** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		..		199		4,192		4,391		..		13		472		485					
Aggregate No. of Days absent from Port	..		.		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH—																						
Herrings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	301	116	301	116	301	116	119	27
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	301	116	301	116	301	116	119	27
DEMERSAL FISH—																						
Round.																						
Cod, Codling	..	..	..	..	222	81	4,483	1,344	4,705	1,425	..	..	108	44	1,273	361	1,381	405	6,086	1,830	10,759	2,935
Ling	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Torsk (Tusk)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saithe (Coal Fish)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Haddocks, ex. La.																					19	3
,, Large, ,, Medium, ,, Small	..	..	..	..	587	335	5,758	2,828	6,345	3,163	..	..	..	..	..	..	..	..	6,345	3,163	10,008	4,038

Whitings	..	..	..	..	39	17	212	92	251	109	..	..	..	..	..	..	..	..	251	109	705	245
Conger Eels	..	..	..	..	37	25	57	23	94	48	..	..	..	..	..	..	..	..	94	48	119	38
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Round Fish	..	..	..	..	885	458	10,510	4,287	11,395	4,745	..	..	108	44	1,273	361	1,381	405	12,776	5,150	21,610	7,259
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	..	..	..	..	..	..	12	19	12	19	..	..	..	..	..	..	..	..	12	19	7	14
Lemon Soles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Flounders	..	..	..	..	..	..	66	55	66	55	..	..	..	..	..	..	..	..	66	55	218	149
Plaice, Large, Medium, Small	..	..	..	..	..	..	1,322	1,138	1,322	1,138	..	..	..	..	..	..	..	..	1,322	1,138	1,608	1,062
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	..	..	..	..	..	..	1,400	1,212	1,400	1,212	..	..	..	..	..	..	..	..	1,400	1,212	1,833	1,225
Skates and Rays	..	..	..	..	16	8	..	..	16	8	..	..	..	..	213	53	213	53	229	61	23	7
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
GRAND TOTALS	..	..	..	..	901	466	11,910	5,499	12,811	5,965	..	..	108	44	1,787	530	1,895	574	14,706	6,539	23,585	8,518

SHELL FISH.

	Oysters.		Lobsters.		Crabs.		Mussels.		Clams.		Unclassified.					
	No.	£	No.	£	No.	£	Cwts.	£	Cwts.	£	Cwts.	£				
	..	..	5,377	320	6,772	39	1,400	76	..	..	763	135	..	570	..	487
TOTAL VALUE OF ALL FISH													..	**7,109**	..	**9,005**
Fish used for Manure													..	..	..	..
,, ,, Bait (included above)													..	..	..	..

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Lybster** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		..		61		801		862		..		..		267		267					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH—																						
Herrings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,971	791	1,971	791	1,971	791	895	273
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	1
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,971	791	1,971	791	1,971	791	899	274
DEMERSAL FISH—																						
Round.																						
Cod, Codling	..	..	..	..	377	133	1,635	409	2,012	542	..	..	..	..	..	..	..	..	2,012	542	4,034	945
Ling	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Torsk (Tusk)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saithe (Coal Fish)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	1
Haddocks, ex. La., Large, Medium, Small	..	..	..	..	210	91	423	174	633	265	..	..	..	..	..	..	..	..	633	265	1,513	610

Whitings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Conger Eels	..	..	..	..	..	..	4	1	4	1	..	..	..	..	..	..	..	..	4	1	..	..
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Round Fish	..	..	..	..	587	224	2,062	584	2,649	808	..	..	..	..	..	..	..	..	2,649	808	5,555	1,556
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	..	..	..	..	2	4	..	..	2	4	..	..	..	..	..	..	..	..	2	4	..	..
Lemon Soles.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Flounders	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Plaice, Large	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
,, Medium	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
,, Small	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	..	..	..	..	2	4	..	..	2	4	..	..	..	..	..	..	..	..	2	4	1	1
Skates and Rays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	88	11	88	11	..	..	..	..	..	..	..	..	88	11	24	5
GRAND TOTALS	..	..	..	..	589	228	2,150	595	2,739	823	..	..	..	..	1,971	791	1,971	791	4,710	1,614	6,479	1,836

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	..	..	1,311	88	5,175	32	..	..	..	..	..	..	..	120	..	37
TOTAL VALUE OF ALL FISH													..	**1,734**	..	**1,873**
Fish used for Manure													..	..	..	..
,, ,, Bait (included above)													..	..	..	..

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Wick** during the Year 1913 and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	2		281		1,812		8,974		11,067		5,080		635		5,116		10,831					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
PELAGIC FISH—	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
Herrings	..	..	..	..	..	..	..	..	..	..	227,606	119,187	22,371	12,186	177,321	93,491	427,298	224,864	427,298	224,864	798,475	224,184
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	100	13	100	13	937	136	210	11	642	47	1,789	194	1,889	207	291	55
Total of Pelagic Fish	..	..	..	..	..	..	100	13	100	13	228,543	119,323	22,581	12,197	177,963	93,538	429,087	225,058	429,187	225,071	598,766	224,239
DEMERSAL FISH—																						
Round.																						
Cod, Codling	19	23	461	149	6,671	1,81	9,707	3,047	16,839	5,006	274	140	831	348	2,368	1,059	3,473	1,547	20,331	6,576	7,734	10,601
Ling	..	..	139	45	39	15	131	48	309	108	..	..	..	..	..	..	..	..	309	108	340	126
Torsk (Tusk)	..	..	14	2	..	..	..	..	14	2	..	..	..	..	..	..	..	..	14	2	3	1
Saithe (Coal Fish)	..	..	1,242	172	414	71	800	125	2,456	368	..	..	..	..	9	2	9	2	2,465	370	880	149
Haddocks, ex. La., Large, Medium, Small	11	17	..	..	17	6	1,053	361	1,070	367	..	..	..	..	..	..	..	..	1,081	384	2,572	707

Whitings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Conger Eels	..	..	1	1	34	12	53	19	88	32	..	..	..	..	..	..	..	..	88	32	47	20
Gurnards	..	..	..	..	12	2	80	14	92	16	..	..	..	..	..	..	..	..	92	16	47	12
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	2	1	..	..	..	..	2	1	..	..	..	..	..	..	..	..	2	1	..	..
Total of Round Fish	30	40	1,859	370	7,187	1,916	11,824	3,614	20,870	5,900	274	140	831	348	2,377	1,061	3,482	1,549	24,382	7,489	41,623	11,616
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	1	2	19	29	40	54	124	189	183	272	..	..	..	..	2	1	2	1	186	275	146	230
Lemon Soles	2	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	6	..	..
Flounders	..	..	..	..	..	..	210	85	210	85	..	..	..	..	..	..	..	..	210	85	908	291
Plaice, Large, „ Medium, „ Small	17	24	..	..	..	..	17	25	17	25	..	..	3	3	6	6	9	9	43	58	8	14
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	10	5	10	5	..	..	..	..	..	..	..	..	10	5	65	30
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	20	32	19	29	40	54	361	304	420	387	..	..	3	3	8	7	11	10	451	429	1,127	565
Skates and Rays	..	..	96	23	129	42	226	71	451	136	..	..	..	..	3	1	3	1	454	137	235	71
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	10	6	10	6	10	14	50
GRAND TOTALS	50	72	1,974	422	7,356	2,012	12,511	4,002	21,841	6,436	228,817	119,463	23,415	12,548	180,357	94,617	432,589	226,628	454,480	233,136	641,765	236,541

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified Cwts.	Unclassified £				
	..	..	35,843	2,287	194,306	1,552	..	..	..	..	850	177	..	4,016	..	4,327
TOTAL VALUE OF ALL FISH													..	**237,152**	..	**240,868**
Fish used for Manure													..	..	..	..
„ „ Bait (included above)													..	..	..	..

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Orkney** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam Drifters.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	13		150		397		2,360		2,907		5,282		46		3,132		8,460					
Aggregate No of Days absent from Port	161		200		397		2,360		2,957		6,205		70		4,276		10,551					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH—																						
Herrings	..	..	..	..	..	..	..	..	..	..	23,4277	138,754	1,803	1,004	82,314	45,982	318,394	185,740	318,394	185,740	541,117	221,652
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	120	6	..	..	102	9	222	15	222	15	54	12
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	234,397	138,760	1,803	1,004	82,416	45,991	318,616	185,755	318,616	185,755	541,171	221,664
DEMERSAL FISH—																						
Round.																						
Cod, Codling	6,673	2,109	282	94	1,267	778	6,990	2,835	8,539	3,707	..	..	..	..	..	..	..	..	15,212	5,816	25,760	8,788
Ling	..	..	40	15	..	..	40	13	80	28	..	..	..	..	..	..	..	..	80	28	141	59
Torsk (Tusk)	..	..	4	1	..	..	..	..	4	1	..	..	..	..	..	..	..	..	4	1	10	3
Saithe (Coal Fish)	333	50	300	36	..	..	1,396	199	1,696	235	..	..	..	..	3,321	74	3,321	74	5,350	359	2,303	269
Haddocks, ex. La., Large, Medium, Small	93	55	..	..	182	96	269	156	451	252	..	..	..	..	..	..	..	..	544	307	799	422

Whitings	10	7	..	..	..	..	15	8	15	8	..	..	..	..	..	..	..	..	25	15	..	..
Conger Eels	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Total of Round Fish	7,109	2,221	626	146	1,449	874	8,710	3,211	10,785	4,231	..	..	..	..	3,321	74	3,321	74	21,215	6,526	29,014	9,542
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	1	1	..	..	12	24	116	225	128	249	..	..	..	..	..	..	..	..	129	250	91	156
Lemon Soles	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	1	1
Flounders	..	..	..	..	..	..	40	20	40	20	..	..	..	..	..	..	..	..	40	20	26	13
Plaice, Large, „ Medium, „ Small	4	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	6	1	1
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	31	21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	31	21	10	5
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	6	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	4	..	..
Total of Flat Fish	45	35	..	..	12	24	156	245	168	269	..	..	..	..	..	..	..	..	213	304	129	176
Skates and Rays	17	6	..	..	..	..	133	52	133	52	..	..	..	..	..	..	..	..	150	58	116	52
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
GRAND TOTALS	7,171	2,262	626	146	1,461	898	8,999	3,508	11,086	4,552	234,397	138,760	1,803	1,004	85,737	46,065	321,937	185,829	340,194	192,643	570,430	231,434

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified.. Cwts.	Unclassified.. £				
	..	..	81,225	6,210	104,450	533	..	..	..	..	950	221	..	6,964	..	5,028
TOTAL VALUE OF ALL FISH													..	**199,607**	..	**236,462**
Fish used for Manure													..	80	..	..
„ „ Bait (included above)													..	..	..	..

APPENDIX B.—No II.—Return respecting Vessels arriving and Fish landed in the District of **Shetland** during the Year 1913, and showing the catch and value during the previous Year

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		..		..		..		..		..		..		..		..					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
PELAGIC FISH—	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
Herrings	..	..	..	..	..	..	..	..	..	..	575,448	262,744	2,060	566	131,791	68,814	709,299	332,124	709.299	332,124	1,393,752	525,514
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	3,050	282	..	..	2,060	169	5,110	451	5,110	451	7,712	654
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	578,498	263,026	2,060	566	133,851	68,983	714,409	332,575	714,409	332,575	1,401,464	526,168
DEMERSAL FISH—																						
Round.																						
Cod, Codling	..	..	4,735	1,493	486	169	4,261	1,364	9,482	3,026	..	..	2,642	793	..	..	2,642	793	12,124	3,819	14,444	4,039
Ling	80	25	2,473	787	17	6	1,373	430	3,863	1,223	..	..	..	..	..	..	..	..	3,943	1,248	5,495	1,580
Torsk (Tusk)	..	..	594	101	13	2	637	133	1,244	236	..	..	..	..	..	..	..	..	1,244	236	2,024	331
Saithe (Coal Fish)	266	30	14,141	1,664	..	..	11,062	1,206	25,203	2,870	..	..	..	..	..	..	..	..	25,469	2,900	22,883	2,617
Haddocks, ex. La., Large, Medium, Small	..	..	..	..	212	127	11,310	4,739	11,522	4,866	..	..	..	..	..	..	..	..	11,522	4,866	17,265	6,817

Whitings	..	..	..	..	..	..	1,236	397	1,236	397	..	..	..	..	..	..	..	..	1,236	397	1,567	448
Conger Eels	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1
Total of Round Fish	346	55	21,943	4,045	728	304	29,879	8,269	52,550	12,618	..	..	2,642	793	..	..	2,642	793	55,538	13,466	63,681	15,833
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	..	..	158	195	128	205	414	529	700	929	..	..	..	..	..	..	..	..	700	929	862	1,455
Lemon Soles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Flounders	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plaice, Large, Medium, Small	..	..	..	..	..	..	29	16	29	16	..	..	..	..	..	..	..	..	29	16	43	24
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	320	146	320	146	..	..	..	..	..	..	..	..	320	146	302	134
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	..	..	158	195	128	205	763	691	1,049	1,091	..	..	..	..	..	..	..	..	1,049	1,091	1,207	1,613
Skates and Rays	..	..	315	62	34	5	349	71	698	138	..	..	..	..	..	..	..	..	698	138	1,182	161
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
GRAND TOTALS	346	55	22,416	4,302	890	514	30,991	9,031	54,297	13,847	578,498	263,026	4,702	1,359	133,851	68,983	717,051	333,368	771,694	347,270	1,467,534	543,775

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	200	1	985	101	..	..	300	15	..	..	2,639	507	..	624	..	544
TOTAL VALUE OF ALL FISH													..	347,894	..	544,319
Fish used for Manure													..	..	..	..
" " Bait (included above)													5,850	1,345	..	..

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Stornoway** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	1		842		17		5,702		6,561		4,190		268		3,275		7,733					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
PELAGIC FISH—	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
Herrings	..	..	..	..	..	..	..	..	..	..	430,542	121,240	9,143	5,811	84,565	43,715	524,250	170,766	524,250	170,766	284,559	108,180
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	3,497	555	..	..	3,375	408	6,872	963	6,872	963	6,218	681
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	434,039	121,795	9,143	5,811	87,940	44,123	531,122	171,729	531,122	171,729	290,777	108,861
DEMERSAL FISH—																						
Round.																						
Cod, Codling	8	2	4,548	1,540	6	2	6,130	1,882	10,684	3,424	..	..	..	..	..	..	..	..	10,692	3,426	8,484	2,385
Ling	..	..	3,354	1,495	..	..	15,523	4,847	18,877	6,342	..	..	..	..	..	..	..	..	18,877	6,342	22,264	7,309
Torsk (Tusk)	..	..	30	8	..	..	1,676	335	1,706	343	..	..	..	..	..	..	..	..	1,706	343	1,890	378
Saithe (Coal Fish)	..	..	2884	459	143	28	14,277	1,929	17,304	2,416	..	..	..	..	..	..	..	..	17,304	2,416	12,834	1,715
Haddocks, ex. La., Large, Medium, Small	4	1	..	..	..	..	8,209	3,111	8,209	3,111	..	..	..	..	..	..	..	..	8,213	3,112	9,621	3,661

Whitings	..	..	..	..	..	..	237	63	237	63	..	..	..	..	..	..	..	..	237	63	378	101
Conger Eels	..	..	1,096	533	..	..	3,267	1,306	4,363	1,839	..	..	..	..	..	..	..	..	4,363	1,839	5,467	2,034
Gurnards	..	..	..	..	..	..	930	253	930	253	..	..	..	..	..	..	..	..	930	253	1,855	509
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	4	4	..	..	..	..	4	4	..	..	..	..	..	..	..	..	4	4	60	49
Total of Round Fish	12	3	11,916	4,039	149	30	50,249	13,726	62,314	17,795	..	..	..	..	..	..	..	..	62,326	17,798	62,853	18,141
FLAT.																						
Turbot	..	..	..	..	..	..	12	6	12	6	..	..	..	..	..	..	..	..	12	6	26	14
Halibut	..	..	230	473	..	..	1,251	664	1,481	1,137	..	..	..	..	..	..	..	..	1,481	1,137	1,413	1,033
Lemon Soles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Flounders	..	..	..	..	..	..	1,679	511	1,679	511	..	..	..	..	..	..	..	..	1,679	511	1,976	654
Plaice, Large, Medium, Small	43	86	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	43	86	..	..
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	1
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	43	86	230	473	..	..	2,942	1,181	3,172	1,654	..	..	..	..	..	..	..	..	3,215	1,740	3,419	1,702
Skates and Rays	..	..	1,489	329	..	..	4,423	507	5,912	836	..	..	..	..	..	..	..	..	5,912	836	7,434	1,195
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	457	107	6	1	3,174	547	3,637	655	..	..	..	..	..	..	..	..	3,637	655	3,205	641
GRAND TOTALS	55	89	14,092	4,948	155	31	60,788	15,961	75,035	20,940	434,039	121,795	9,143	5,811	87,940	44,123	531,122	171,729	606,212	192,758	367,688	130,540

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	..	..	90,760	4,377	20,692	80	105	12	..	..	1,690	348	..	4,817	..	4,609
TOTAL VALUE OF ALL FISH													..	**197,575**	..	**135,149**
Fish used for Manure													..	..	..	..
,, ,, Bait (included above)													3,717	1,939	4,397	1,275

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Barra** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		..		..		1,880		1,880		1,681		211		1,932		3,824					
Aggregate No. of Days absent from Port	..		..		..		1,880		1,880		1,900		239		2,218		4,357					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH—																						
Herrings	..	..	..	..	..	..	..	..	..	..	73,164	50,594	4,228	3,130	41,965	25,616	119,357	79,340	119,357	79,340	57,826	33,355
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3,056	90	3,056	90	3,056	90	5,436	134
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	73,164	50,594	4,228	3,130	45,021	25,706	122,413	79,430	122,413	79,430	63,262	33,489
DEMERSAL FISH—																						
Round.																						
Cod	..	..	..	..	..	..	866	212	866	212	..	..	..	..	..	..	..	..	1663	385	2,622	626
Codling	..	..	..	..	..	..	797	173	797	173	..	..	..	..	..	..	..	..				
Ling	..	..	..	..	..	..	500	181	500	181	..	..	..	..	..	..	..	..	500	181	6,008	1,965
Torsk (Tusk)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	162	37
Saithe (Coal Fish)	..	..	..	..	..	..	3,974	384	3,974	384	..	..	..	..	..	..	..	..	3,974	384	5178	373
Haddocks, ex. La.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
,, Large	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
,, Medium	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	34	11
,, Small	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Whitings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	3
Conger Eels	..	..	..	..	..	..	68	33	68	33	..	..	..	..	..	..	..	..	68	33	826	356
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	16	5	16	5	..	..	..	..	..	..	..	..	16	5	101	32
Total of Round Fish	..	..	..	..	..	..	6,221	988	6,221	988	..	..	..	..	..	..	..	..	6,221	988	14,943	3,403
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	..	..	..	..	..	..	28	35	28	35	..	..	..	..	..	..	..	..	28	35	258	302
Lemon Soles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Flounders	..	..	..	..	..	..	1,161	365	1,161	365	..	..	..	..	..	..	..	..	1,161	365	1,311	228
Plaice, Large, Medium, Small	..	..	..	..	..	..	673	245	673	245	..	..	..	..	..	..	..	..	673	245	316	128
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50	10
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	..	..	..	..	..	..	1,862	645	1,862	645	..	..	..	..	..	..	..	..	1,862	645	1,935	768
Skates and Rays	..	..	..	..	..	..	207	35	207	35	..	..	..	..	..	..	..	..	207	35	859	171
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
GRAND TOTALS	..	..	..	..	..	..	8,290	1,668	8,290	1,668	73,164	50,594	4,228	3,130	45,021	25,706	122,413	79,430	130,703	81,098	80,999	37,831

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	..	..	113,948	5,571	..	..	..	..	..	..	6,240	1,277	..	6,848	..	6,142
TOTAL VALUE OF ALL FISH													..	**87,946**	..	**43,973**
Fish used for Manure													1,644	61	7,246	158
" " Bait (included above)													2,036	430	2,242	755

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Lochbroom** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		..		..		..		..		..		..		..		..					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH—																						
Herrings	..	..	..	..	..	..	..	..	..	..	1,282	213	840	337	14,567	5,029	16,689	5,579	16,689	5,579	10,949	3,934
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	..	..	326	27	326	27	326	27	565	48
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	1,282	213	840	337	14,893	5,056	17,015	5,606	17,015	5,606	11,514	3,982
DEMERSAL FISH—																						
Round.																						
Cod, Codling	..	..	..	..	..	..	2,121	766	2,121	766	..	..	..	..	7,060	1,859	7,060	1,859	9,181	2,625	10,299	2,984
Ling	..	..	..	..	..	..	21	5	21	5	..	..	..	..	..	..	..	..	21	5	33	12
Torsk (Tusk)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saithe (Coal Fish)	..	..	..	..	..	..	250	48	250	48	..	..	..	..	1,326	202	1,326	202	1,576	250	1,440	234
Haddocks ex. La., ,, Large, ,, Medium, ,, Small	..	..	..	..	..	..	2,623	1,032	2,623	1,032	..	..	..	..	..	..	..	..	2,623	1,032	3,369	1,362

Whitings	..	..	..	..	..	..	217	90	217	90	..	..	..	..	..	..	..	..	217	90	301	123
Conger Eels	..	..	..	..	..	..	76	32	76	32	..	..	..	..	..	..	..	..	76	32	255	55
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Round Fish	..	..	..	..	..	..	5,308	1,973	5,308	1,973	..	..	..	..	8,386	2,061	8,386	2,061	13,694	4,034	15,697	4,770
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2
Lemon Soles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Flounders	..	..	..	..	..	..	24	20	24	20	..	..	..	..	..	..	..	..	24	20	26	15
Plaice Large, Medium, Small	..	..	..	..	..	..	79	48	79	48	..	..	..	..	10	10	10	10	89	58	57	37
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	..	..	..	..	..	..	103	68	103	68	..	..	..	..	10	10	10	10	113	78	84	54
Skates and Rays	..	..	..	..	..	..	33	9	33	9	..	..	..	..	..	..	..	..	33	9	39	14
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
GRAND TOTALS	..	..	..	..	..	..	5,444	2,050	5,444	2,050	1,282	213	840	337	23,289	7,127	25,411	7,677	30,855	9,727	27,334	8,820

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	..	..	69,258	3,621	..	..	1,162	59	..	..	817	213	..	3,893	..	3,665
TOTAL VALUE OF ALL FISH													..	**13,620**	..	**12,485**
Fish used for Manure													..	..	..	..
" " Bait (included above)													70	28	840	345

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Loch Carron and Skye** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		..		..		..		..		..		..		..		..					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH—																						
Herrings	..	..	..	..	..	..	..	..	..	..	8,392	2,555	5,836	2,381	25,879	8,210	40,107	13,146	40,107	13,146	58,636	17,509
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	256	21	2,464	622	1,546	358	4,266	1,001	4,266	1,001	5,066	1,070
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	8,648	2,576	8,300	3,003	27,425	8,568	44,373	14,147	44,373	14,147	63,702	18,579
DEMERSAL FISH—																						
Round.																						
Cod, Codling	..	..	..	..	295	123	1,917	821	2,212	944	..	..	38	14	139	67	177	81	2,389	1,025	3,101	1,258
Ling	..	..	..	..	53	21	56	23	109	44	..	..	..	..	16	5	16	5	125	49	330	118
Torsk (Tusk)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1
Saithe (Coal Fish)	..	..	..	..	12	3	792	158	804	161	..	..	812	106	3,476	509	4,288	615	5,092	776	3,836	503
Haddocks, ex. La., „ Large, „ Medium, „ Small	..	..	..	..	18	9	1,010	492	1,028	501	..	..	..	..	..	..	..	..	1,028	501	1,841	934

Whitings	..	..	..	..	..	..	154	77	154	77	..	..	..	..	..	..	..	..	154	77	325	155
Conger Eels	..	..	..	..	193	113	84	48	277	161	..	..	..	..	..	..	..	..	277	161	312	149
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	67	15
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	41	45	..	..	41	45	..	..	94	103	432	496	526	599	567	644	203	108
Total of Round Fish	..	..	..	..	612	314	4,013	1,619	4,625	1,933	..	..	944	223	4,063	1,077	5,007	1,300	9,632	3,233	10,017	3,241
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	5
Halibut	..	..	..	..	1	2	4	4	5	6	..	..	..	..	..	..	..	..	5	6	39	101
Lemon Soles	..	..	..	..	..	..	23	13	23	13	..	..	..	..	..	..	..	..	23	13	63	50
Flounders	..	..	..	..	3	2	109	65	112	67	..	..	..	..	..	..	..	..	112	67	122	70
Plaice, Large, ,, Medium, ,, Small	..	..	..	..	6	4	262	160	268	164	..	..	..	..	..	..	..	..	268	164	362	208
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	2
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	..	..	..	..	10	8	398	242	408	250	..	..	..	..	..	..	..	..	408	250	594	436
Skates and Rays	..	..	..	..	113	39	188	62	301	101	..	..	7	3	..	..	7	3	308	104	318	95
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	8	3	52	15	60	18	..	..	34	6	66	12	100	18	160	36	224	62
GRAND TOTALS	..	..	..	..	743	364	4,651	1,938	5,394	2,302	8,648	2,576	9,285	3,235	31,554	9,657	49,487	15,468	54,881	17,770	74,855	22,413

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified Cwts.	Unclassified £				
	..	..	88,517	5,288	53,390	116	26	3	..	..	6,942	1,663	..	7,070	..	5,204
TOTAL VALUE OF ALL FISH													..	**24,840**	..	**27,617**
Fish used for Manure													..	..	..	..
,, ,, Bait (included above)													..	..	..	..

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Fort-William** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		..		..		..		..		..		..		..		..					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
PELAGIC FISH—	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
Herrings	..	..	..	..	..	..	..	..	..	..	104,973	40,065	8,388	4,006	6,446	2,409	119,807	46,480	119,807	46,480	89,214	32,281
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	81	42	..	..	92	31	173	73	173	73	672	156
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	105,054	40,107	8,388	4,006	6,538	2,440	119,980	46,553	119,980	46,553	89,886	32,437
DEMERSAL FISH—																						
Round.																						
Cod, Codling	236	118	2,434	1,059	1,425	584	708	329	4,567	1,972	..	..	..	..	..	..	..	..	4,803	2,090	8,967	3,030
Ling	6	3	2,761	1,450	385	199	200	60	3,346	1,709	..	..	..	..	..	..	..	..	3,352	1,712	5,384	2,223
Torsk (Tusk)	..	..	72	27	4	1	..	..	76	28	..	..	..	..	..	..	..	..	76	28	209	28
Saithe (Coal Fish)	13	2	207	44	89	8	571	138	867	190	..	..	..	..	..	..	..	..	880	192	2,416	347
Haddocks ex. La., ,, Large, ,, Medium, ,, Small	84	60	2	2	564	501	259	220	825	723	..	..	..	..	..	..	..	..	909	783	2,865	1,451

Whitings	4	2	..	..	..	..	185	153	185	153	..	..	..	..	..	..	..	..	189	155	736	340
Conger Eels	..	..	8,582	3,869	2,375	855	192	79	11,149	4,803	..	..	..	..	..	..	..	..	11,149	4,803	22,291	6,021
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	144	28
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	140	44
Monks (Anglers)	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	34	6
Hake	10	14	634	815	10	10	..	..	644	825	..	..	..	..	..	..	..	..	654	839	1,070	605
Total of Round Fish	356	200	14,692	7,266	4,852	2,158	2,115	979	21,659	10,403	..	..	..	..	..	..	..	..	22,015	10,603	44,256	14,123
FLAT.																						
Turbot	22	81	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22	81	20	49
Halibut	16	45	141	256	14	23	..	..	155	279	..	..	..	..	..	..	..	..	171	324	243	469
Lemon Soles	4	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	6	57	77
Flounders	..	..	..	..	..	..	115	90	115	90	..	..	..	..	..	..	..	..	115	90	333	226
Plaice, Large, ,, Medium, ,, Small	103	225	..	..	52	66	..	..	52	66	..	..	..	..	..	..	..	..	155	291	388	471
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	9
Dabs	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	364	93
Whitches	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	137	54
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	136	64
Total of Flat Fish	148	360	141	256	66	89	115	90	322	435	..	..	..	..	..	..	..	..	470	795	1,681	1,512
Skates and Rays	155	51	5,496	2,030	1,320	458	190	62	7,006	2,550	..	..	..	..	..	..	..	..	7,161	2,601	16,768	4,801
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	10	5	593	24	..	..	..	..	395	24	..	..	..	..	..	..	..	..	405	29	126	9
GRAND TOTALS	669	616	20,724	9,576	6,238	2,705	2,420	1,131	29,382	13,412	105,054	40,107	8,388	4,006	6,538	2,440	119,980	46,533	150,031	60,581	152,717	52,882

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	..	..	50,208	1,903	36,140	178	..	..	..	..	2,389	624	..	2,705	..	2,826
TOTAL VALUE OF ALL FISH													..	**63,286**	..	**55,708**
Fish used for Manure													..	..	..	..
,, ,, Bait (included above)													..	..	..	..

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Campbeltown** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity. and Value.		1912. Total Quantity. and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		..		..		..		..		..		..		..		..					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH—																						
Herrings	..	..	..	..	..	..	..	..	..	..	11	5	119,829	51,261	4,038	1,357	123,878	52,623	123,878	52,623	105,809	36,421
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	1,144	173	89	14	1,233	187	1,233	187	1,140	188
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	11	5	120,973	51,434	4,127	1,371	125,111	52,810	125,111	52,810	106,949	36,609
DEMERSAL FISH—																						
Round.																						
Cod, Codling	..	..	19	10	448	174	1,124	461	1,609	645	..	..	17	10	..	..	17	10	1,626	655	2,228	872
Ling	..	..	16	9	23	8	..	..	39	17	..	..	..	..	..	..	..	..	39	17	78	39
Torsk (Tusk)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saithe (Coal Fish)	..	..	..	..	14	3	507	83	521	86	..	..	288	39	16	2	304	41	825	127	1,120	214
Haddocks, ex. La., Large, Medium, Small	..	..	..	..	12	12	47	41	59	53	..	..	..	..	..	..	..	..	59	53	154	130

Whitings	..	..	..	..	31	36	150	199	181	235	..	..	..	..	..	..	..	..	181	235	228	229
Conger Eels	..	..	..	..	37	12	2	1	39	13	..	..	..	..	..	..	..	..	39	13	56	30
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	2	1	..	..	2	1	..	..	..	..	..	..	..	..	2	1	..	..
Total of Round Fish	..	..	35	19	567	246	1,848	785	2,450	1,050	..	..	305	49	16	2	321	51	2,771	1,101	3,864	1,514
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	26
Halibut	..	..	..	..	1	2	1	2	2	4	..	..	..	..	..	..	..	..	2	4	3	6
Lemon Soles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Flounders	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plaice, Large, Medium, Small	..	..	..	..	..	..	249	349	249	349	..	..	21	39	..	..	21	39	270	388	348	462
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	3	3	3	3	..	..	..	..	..	..	..	..	3	3	..	..
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	..	..	..	..	1	2	253	354	254	356	..	..	21	39	..	..	21	39	275	395	361	494
Skates and Rays	..	..	..	..	114	36	..	..	114	36	..	..	..	..	..	..	..	..	114	36	172	69
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
GRAND TOTALS	..	..	35	19	682	284	2,101	1,139	2,818	1,442	11	5	121,299	51,522	4,143	1,373	125,453	52,900	128,271	54,342	111,346	38,686

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	..	..	44,120	2,147	908	7	270	44	..	..	1,139	246	..	2,444	..	2,702
TOTAL VALUE OF ALL FISH													..	**56,786**	..	**41,388**
Fish used for Manure													..	..	..	..
" " Bait (included above)													..	..	..	..

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Inveraray** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		..		..		..		..		..		..		..		..					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
PELAGIC FISH—	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
Herrings	..	..	..	..	..	..	..	..	..	..	..	..	6,458	3,009	4,238	2,039	10,696	5,048	10,696	5,048	7,672	2,182
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	898	111	1,465	207	2,363	318	2,363	318	3,387	642
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	..	..	7,356	3,120	5,703	2,246	13,059	5,366	13,059	5,366	11,059	2,824
DEMERSAL FISH—																						
Round.																						
Cod, Codling	..	..	..	..	..	..	459	310	459	310	..	..	31	19	255	129	286	148	745	458	712	459
Ling	..	..	..	..	..	..	14	8	14	8	..	..	..	..	..	..	..	..	14	8	13	7
Torsk (Tusk)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saithe (Coal Fish)	..	..	..	..	..	..	31	11	31	11	..	..	..	..	226	30	226	30	257	41	58	10
Haddocks, ex. La., „ Large, „ Medium, „ Small	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Whitings	..	..	..	..	..	..	4	4	4	4	..	..	..	..	..	..	..	..	4	4	2	2
Conger Eels	..	..	..	..	..	..	31	17	31	17	..	..	..	..	..	..	..	..	31	17	26	10
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Round Fish	..	..	..	..	..	..	539	350	539	350	..	..	31	19	481	159	512	178	1,051	528	811	488
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lemon Soles.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Flounders	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plaice, Large, „ Medium, „ Small	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	1	2	1	2	6	9
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	1	2	1	2	6	9
Skates and Rays	..	..	..	..	..	..	11	3	11	3	..	..	..	..	..	..	..	..	11	3	9	2
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2
GRAND TOTALS	..	..	..	..	..	..	550	353	550	353	..	..	7,387	3,139	6,185	2,407	13,572	5,546	14,122	5,899	11,888	3,325

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	10,500	45	17,264	855	..	..	13	3	..	..	787	186	..	1,089	..	1,019
TOTAL VALUE OF ALL FISH													..	6,988	..	4,344
Fish used for Manure													..	..	..	..
„ „ Bait (included above)													..	..	..	..

APPENDIX B.—No. 11.—Return respecting Vessels arriving and Fish landed in the District of **Rothesay** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		..		..		..		..		..		..		..		..					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH—																						
Herrings	..	..	..	..	..	..	..	..	..	..	..	..	10,467	4,814	1,672	760	12,139	5,574	12,139	5,574	16,082	6,643
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	1,087	142	1,499	200	2,586	342	2,586	342	1,497	316
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	..	..	11,554	4,956	3,171	960	14,725	5,916	14,725	5,916	17,579	6,959
DEMERSAL FISH—																						
Round.																						
Cod, Codling	..	..	3	3	409	282	756	609	1,168	894	..	..	19	11	360	247	379	258	1,547	1,152	1,505	1,117
Ling	..	..	..	..	165	114	..	..	165	114	..	..	..	..	..	..	..	..	165	114	107	63
Torsk (Tusk)	..	..	..	..	..	..	4	2	4	2	..	..	..	..	..	..	..	..	4	2	..	..
Saithe (Coal Fish)	..	..	4	4	..	..	212	55	216	59	..	..	31	8	929	150	960	158	1,176	217	1,191	197
Haddocks, ex. La., Large, Medium, Small	..	..	..	..	..	..	20	20	20	20	..	..	..	..	1	1	1	1	21	21	161	161

Whitings	..	..	..	..	..	..	49	59	49	59	..	..	..	..	..	..	..	..	49	59	155	157
Conger Eels	..	..	3	4	469	229	47	23	519	256	..	..	..	..	6	3	6	3	525	259	1,001	385
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	1	1	1	1	..	..	..	..	27	13	27	13	28	14	86	45
Total of Round Fish	..	..	10	11	1,043	625	1,089	769	2,142	1,405	..	..	50	19	1,323	414	1,373	433	3,515	1,838	4,206	2,125
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lemon Soles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Flounders	..	..	..	..	..	..	127	197	127	197	..	..	1	2	12	18	13	20	140	217	132	183
Plaice, Large, Medium, Small	..	..	..	..	..	..	31	55	31	55	..	..	..	..	..	..	..	..	31	55	118	190
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	..	..	..	..	..	..	158	252	158	252	..	..	1	2	12	18	13	20	171	272	250	373
Skates and Rays	..	..	..	..	170	77	..	..	170	77	..	..	..	..	..	..	..	..	170	77	326	119
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
GRAND TOTALS	..	..	10	11	1,213	702	1,247	1,021	2,470	1,734	..	..	11,605	4,977	4,506	1,392	16,111	6,369	18,581	8,103	22,361	9,576

SHELL FISH.

	Oysters.		Lobsters.		Crabs.		Mussels.		Clams.		Unclassified.					
	No	£	No.	£	No.	£	Cwts.	£	Cwts.	£	Cwts.	£				
	..	..	1,209	74	..	..	2,228	194	..	..	1,072	279	..	547	..	621
TOTAL VALUE OF ALL FISH													..	**8,650**	..	**10,197**
Fish used for Manure													..	..	..	..
" " Bait (included above)													..	..	..	..

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Greenock** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		7		..		..		..		..		..		..		..					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH—																						
Herrings	..	..	..	..	..	..	..	..	..	..	..	..	22,872	7,550	1,559	663	24,431	8,213	24,431	8,213	18,084	7,661
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	1,042	195	982	139	2,024	334	2,024	334	910	227
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	..	..	23,914	7,745	2,541	802	26,455	8,547	26,455	8,547	18,994	7,888
DEMERSAL FISH—																						
Round.																						
Cod	..	..	15	9	..	..	..	..	15	9	..	..	..	..	..	..	..	..	757	736	926	798
Codling	..	..	..	..	158	81	562	623	720	704	..	..	..	..	22	23	22	23				
Ling	..	..	525	206	20	13	..	..	545	219	..	..	..	..	..	..	..	..	545	219	1,056	306
Torsk (Tusk)	..	..	30	8	..	..	..	..	30	8	..	..	..	..	..	..	..	..	30	8	21	4
Saithe (Coal Fish)	..	..	..	..	..	..	121	60	121	60	..	..	..	..	..	..	..	..	121	60	153	57
Haddocks, ex. La.																						
„ Large																						
„ Medium	..	..	..	..	..	..	2	50	42	50	..	..	..	..	..	..	..	..	42	50	362	142
„ Small																						

Whitings	..	..	..	..	..	..	118	114	118	114	..	..	..	..	..	..	..	..	118	114	179	176
Conger Eels	..	..	..	..	100	67	8	4	108	71	..	..	..	..	..	..	..	..	108	71	63	36
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	2
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24	9
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	1
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13	11	13	11	13	11	79	20
Total of Round Fish	..	..	570	223	278	161	851	851	1,699	1,235	..	..	..	..	35	34	35	34	1,734	1,269	2,885	1,551
FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	6
Halibut	..	..	193	607	..	..	..	..	193	607	..	..	..	..	..	..	..	..	193	607	798	1,495
Lemon Soles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	11
Flounders	..	..	..	..	11	10	131	146	142	156	..	..	109	116	58	61	167	177	309	333	296	304
Plaice, Large, Medium, Small	..	..	..	..	..	..	122	51	35	51	..	..	58	77	33	45	91	35	126	173	140	195
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	60	11
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22	7
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	3
Total of Flat Fish	..	..	193	607	11	10	166	197	370	814	..	..	167	193	91	106	258	299	628	1,113	1,333	2,032
Skates and Rays	..	..	172	38	79	40	6	2	257	80	..	..	..	..	..	..	..	..	257	80	458	86
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
GRAND TOTALS	..	..	935	868	368	211	1,023	1,050	2,326	2,129	..	..	24,081	7,938	2,667	942	26,748	8,880	29,074	11,009	23,670	11,557

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	..	..	4,480	273	..	..	5,802	334	..	..	841	147	..	754	..	1,082
TOTAL VALUE OF ALL FISH													..	**11,763**	..	**12,639**
Fish used for Manure													..	..	..	..
" " Bait (included above)													..	..	..	..

APPENDIX B.—No. II.—Return respecting Vessels arriving and Fish landed in the District of **Ballantrae** during the Year 1913, and showing the catch and value during the previous Year.

Method of Fishing	Trawls.		Lines.								Nets.								1913. Total Quantity and Value.		1912. Total Quantity and Value.	
	Steam.		Steam.		Motor.		Sail.		Total.		Steam.		Motor.		Sail.		Total.					
No. of Vessels arriving	..		..		..		..		..		..		..		..		..					
Aggregate No. of Days absent from Port	..		..		..		..		..		..		..		..		..					
Description of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
PELAGIC FISH—	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
Herrings	..	..	..	..	..	..	..	..	..	..	213	108	48,335	22,974	4,704	2,848	53,252	25,930	53,252	25,930	64,842	23,317
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	32	116	32	116	32	116	18	79
Mackerel	..	..	..	..	..	..	2	1	2	1	..	..	1,501	134	492	213	1,993	347	1,995	348	2,560	544
Total of Pelagic Fish	..	..	..	..	..	..	2	1	2	1	213	108	49,836	23,108	5,228	3,177	55,277	26,393	55,279	26,394	67,420	23,940
DEMERSAL FISH—																						
Round.																						
Cod, Codling	63	22	903	346	927	422	2,427	1,200	4,257	1,968	351	186	1,035	343	2,110	888	3,496	1,417	7,816	3,407	7,133	3,001
Ling	..	..	410	201	15	11	6	3	431	215	..	..	2	1	2	1	4	2	435	217	364	163
Torsk (Tusk)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saithe (Coal Fish)	3	1	4	1	20	3	20	4	44	8	34	8	321	58	617	117	972	183	1,019	192	1,517	215
Haddocks, ex. La., Large, Medium, Small	388	264	..	..	346	238	190	120	536	358	..	..	..	..	..	..	..	..	924	622	669	457

Whitings	37	17	..	..	742	572	299	194	1,041	766	..	..	..	..	..	..	..	..	1,078	783	1,328	1,092
Conger Eels	8	3	2,572	1,156	122	54	51	33	2,745	1,243	..	..	..	..	..	..	..	..	2,753	1,246	3,489	1,161
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	9	3	24	21	..	..	..	..	24	21	..	..	2	2	3	2	5	4	38	28	40	23
Total of Round Fish	508	310	3,913	1,725	2,172	1,300	2,993	1,554	9,078	4,579	385	194	1,360	404	2,732	1,008	4,477	1,606	14,063	6,495	14,540	6,112
FLAT.																						
Turbot	9	44	..	..	..	..	3	8	3	8	1	3	1	4	53	145	55	152	67	204	63	179
Halibut	5	10	7	15	3	6	..	..	10	21	..	..	..	..	..	1	..	1	15	32	22	46
Lemon Soles	17	76	..	..	..	..	6	27	6	27	..	..	..	..	10	54	10	54	33	157	22	82
Flounders	201	296	..	..	..	..	..	..	..	..	..	..	..	..	526	315	526	315	727	611	1,064	850
Plaice, Large, " Medium, " Small	449	662	..	..	540	746	510	670	1,050	1,416	..	..	922	1,327	713	947	1,635	2,274	3,134	4,352	2,918	3,732
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	5	3	5	3	5	10	18
Dabs	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	7	10	7	10	7	21	12
Whitches	5	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	3	..	..
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Flat Fish	686	1,091	7	15	543	752	519	705	1,069	1,472	1	3	923	1,331	1,315	1,474	2,239	2,808	3,994	5,371	4,120	4,919
Skates and Rays	209	120	2,436	1,048	221	86	696	399	3,353	1,533	..	..	..	..	807	514	807	514	4,369	2,167	4,377	1,436
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	20	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	4	30	3
GRAND TOTALS	1,423	1,525	6,356	2,788	2,936	2,138	4,210	2,659	13,502	7,585	599	305	52,119	24,843	10,082	6,173	62,800	31,321	77,725	40,431	90,487	36,410

SHELL FISH.

	Oysters. No.	Oysters. £	Lobsters. No.	Lobsters. £	Crabs. No.	Crabs. £	Mussels. Cwts.	Mussels. £	Clams. Cwts.	Clams. £	Unclassified. Cwts.	Unclassified. £				
	1,305,400	4,711	10,308	464	61,792	259	3,734	374	..	..	4,288	3,551	..	9,359	..	8,906
TOTAL VALUE OF ALL FISH													..	**49,790**	..	**45,316**
Fish used for Manure													..	..	..	..
" " Bait (included above)													..	..	..	..

APPENDIX B.—No. II.—FISH LANDED.—STATEMENT of the Total Quantity and Value of the different kinds of White and Shell-Fish landed on **East Coast** in the Year 1913.

KINDS OF FISH.	TRAWLS. Steam.		LINES. Steam.		LINES. Motor.		LINES. Sailing.		LINES. TOTAL.		NETS. Steam.		NETS. Motor.		NETS. Sailing.		NETS. TOTAL.		1913. Grand Total Quantity and Value.		1912. Grand Total Quantity and Value.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.				
PELAGIC FISH.	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
Herrings	12,104	6,627	..	..	..	..	..	..	..	..	1,422,733	712,989	126,351	54,522	815,834	383,052	2,364,918	1,150,563	2,377,022	1,157,190	2,552,704	891,862
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8,117	1,772	8,117	1,772	8,117	1,772	5,597	1,866
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	273	787	273	787	273	787	382	984
Mackerel	5,213	2,247	..	..	..	..	102	14	102	14	21,999	1,798	4,748	763	12,045	1,218	38,792	3,779	44,107	6,040	12,780	4,064
Total of Pelagic Fish	17,317	8,874	..	..	..	..	102	14	102	14	1,444,732	714,787	131,099	55,285	836,269	386,829	2,412,100	1,156,901	2,429,519	1,165,789	2,571,463	898,776
DEMERSAL FISH.																						
(*a*) ROUND.																						
Cod, Codling	610,588	344,183	43,856	23,032	17,330	8,705	68,767	33,343	129,953	65,080	9,034	4,752	2,081	947	47,145	21,389	58,260	27,088	798,801	436,351	833,636	389,634
Ling	86,690	27,789	93,075	38,494	401	315	1,565	735	95,041	39,544	..	..	..	..	..	..	..	..	181,731	67,333	138,698	43,261
Torsk (Tusk)	2,327	752	11,837	4,955	..	..	26	9	11,863	4,964	..	..	..	..	..	..	..	..	14,190	5,716	12,175	4,329
Saithe (Coal Fish)	244,473	41,787	7,359	1,324	442	77	6,021	1,215	13,822	2,616	..	..	..	..	18	5	18	5	258,313	44,408	170,405	26,407
Haddocks, ex. La., Large, Medium, Small	571,097	457,722	298	160	8,946	9,657	50,381	41,352	59,625	51,169	..	..	..	..	..	..	..	..	630,722	508,891	853,710	538,202
Whitings	209,196	96,903	..	..	2,106	1,200	7,708	4,610	9,814	5,810	70	20	..	..	60	18	130	38	219,140	102,751	167,857	67,102
Conger Eels	645	244	709	328	267	173	803	443	1,779	944	..	..	..	..	120	297	120	297	2,544	1,485	3,074	1,317
Gurnards	5,527	768	..	..	45	12	90	17	135	29	..	..	..	..	..	..	..	..	5,662	797	6,197	771
Catfish	25,404	7,150	167	29	177	80	519	261	863	370	..	..	..	..	3	3	3	3	26,270	7,523	26,156	7,300
Monks (Anglers)	24,501	6,599	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24,501	6,599	22,228	5 406
Hake	17,420	14,202	112	89	..	..	..	..	112	89	..	..	..	..	..	..	..	..	17,532	14,291	18,498	11,245
Total of Round Fish	1,797,868	998,099	157,413	68,411	29,714	20,219	135,880	81,985	323,007	170,615	9,104	4,772	2,081	947	47,346	21,712	58,531	27,431	2,179,406	1,196,145	2,252,634	1,094,974

(b) FLAT.																						
Turbot	3,674	12,295	6	14	..	..	2	7	8	21	..	..	..	..	..	..	..	..	3,682	12,316	3,906	13,549
Halibut	12,048	30,614	31,055	72,878	83	161	289	634	31,427	73,673	..	..	..	..	7	10	7	10	43,482	104,297	43,758	99,979
Lemon Soles	35,269	80,396	..	..	15	31	58	98	73	129	..	..	112	407	350	1,287	462	1,694	35,804	82,219	39,697	82,025
Flounders	828	1,125	..	..	21	18	2,330	1,727	2,351	1,745	..	..	..	..	753	421	753	421	3,932	3,291	4,443	3,099
Plaice, Large, Medium, Small	27,695	51,128	..	..	43	61	7,869	8,030	7,912	8,091	1	1	43	97	3,176	3,522	3,220	3,620	38,827	62,839	43,020	61,115
Brill	196	399	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	196	399	239	523
Dabs	7,887	2,782	..	..	92	64	1,498	975	1,590	1,039	..	..	..	..	42	32	42	32	9,519	3,853	9,756	3,574
Whitches	28,296	27,953	..	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	28,297	27,954	17,475	18,577
Megrims	18,155	22,068	19	13	..	..	..	..	19	13	..	..	..	..	..	..	..	..	18,174	22,081	16,995	18,210
Total of Flat Fish	134,048	228,760	31,080	72,905	254	335	12,047	11,472	43,381	84,712	1	1	155	504	4,328	5,272	4,484	5,777	181,913	319,249	179,289	300,651
Skates and Rays	61,106	14,419	51,211	14,080	463	218	990	431	52,664	14,729	..	..	..	..	299	105	299	105	114,069	29,253	110,469	28,643
Squids	28	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	28	3	157	57
Unclassified kinds	9,073	1,103	60	6	..	..	291	120	351	126	..	..	..	..	626	80	626	80	10,050	1,309	2,505	479
Total for 1913	2,019,440	1,251,258	239,764	155,402	30,431	20,772	149,310	94,022	419,505	270,196	1,453,837	719,560	133,335	56,736	888,868	413,998	2,476,040	1,190,294	4,914,985	2,711,748	5,116,517	2,323,580
Total for 1912	1,944,311	1,105,562	255,414	154,048	..	138,085	275,113	..	530,527	292,133	1,259,642	474,240	..	451,645	1,382,037	..	2,641,679	925,885	5,116,517	2,323,580	..	..
Increase in 1913	75,129	145,696	..	1,354	..	..	..	..	..	..	194,195	245,320	..	19,089	..	..	..	264,409	..	388,168	..	..
Decrease in 1913	..	..	15,650	..	..	23,291	95,372	..	111,022	21,937	..	..	..	..	359,834	..	165,639	..	201,532	..	..	..

SHELL-FISH.

Oysters.		Lobsters.		Crabs.		Mussels.		Clams.		Unclassified.	
No.	£	No.	£	No.	£	Cwt.	£	Cwt.	£	Cwt.	£
..	..	108,777	5,891	1,936,494	12,997	64,936	3,333	6,853	1,024	11,281	1,998

	£
Total Value of Shell-Fish for 1913 ..	25,243
" " 1912 ..	25,246
Decrease in 1913	3

Grand Total Value of Fish and Shell-Fish for 1913, £2,736,991
" " " 1912, 2,348,826
Increase in 1913, £388,165

APPENDIX B.—No. II.—FISH LANDED.—STATEMENT of the Total Quantity and Value of the different kinds of White and Shell-Fish landed in **Orkney** and **Shetland** in the Year 1913.

KINDS OF FISH.	TRAWLS. Steam. Quantity.	TRAWLS. Steam. Value.	LINES. Steam. Quantity.	LINES. Steam. Value.	LINES. Motor. Quantity.	LINES. Motor. Value.	LINES. Sailing. Quantity.	LINES. Sailing. Value.	LINES. TOTAL. Quantity.	LINES. TOTAL. Value.	NETS. Steam. Quantity.	NETS. Steam. Value.	NETS. Motor. Quantity.	NETS. Motor. Value.	NETS. Sailing. Quantity.	NETS. Sailing. Value.	NETS. TOTAL. Quantity.	NETS. TOTAL. Value.	1913. Grand Total Quantity and Value. Quantity.	1913. Value.	1912. Grand Total Quantity and Value. Quantity.	1912. Value.
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH.																						
Herrings	..	..	..	..	..	..	..	..	..	..	809,725	401,498	3,863	1,570	214,105	114,796	1,027,693	517,864	1,027,693	517,864	1,934,869	747,166
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	..	..	..	..	..	..	..	..	..	..	3,170	288	..	..	2,162	178	5,332	466	5,332	466	7,766	666
Total of Pelagic Fish	..	..	..	..	..	..	..	..	..	..	812,895	401,786	3,863	1,570	216,267	114,974	1,033,025	518,330	1,033,025	518,330	1,942,635	747,832
DEMERSAL FISH.																						
(*a*) ROUND.																						
Cod, Codling	6,673	2,109	5,017	1,587	1,753	947	11,251	4,199	18,021	6,733	..	..	2,642	793	..	..	2,642	793	27,336	9,635	40,204	12,827
Ling	80	25	2,513	802	17	6	1,413	443	3,943	1,251	..	..	..	..	..	..	..	..	4,023	1,276	5,636	1,639
Torsk (Tusk)	..	..	598	102	13	2	637	133	1,248	237	..	..	..	..	..	..	..	..	1,248	237	2,034	334
Saithe (Coal Fish)	599	80	14,441	1,700	..	..	12,458	1,405	26,899	3,105	..	..	..	..	3,321	74	3,321	74	30,819	3,259	25,186	2,886
Haddocks, ex. La., ,, Large, ,, Medium, ,, Small	93	55	..	..	394	223	11,579	4,895	11,973	5,118	..	..	..	..	..	..	..	..	12,066	5,173	18,064	7,239
Whitings	10	7	..	..	..	..	1,251	405	1,251	405	..	..	..	..	..	..	..	..	1,261	412	1,567	448
Conger Eels	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gurnards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monks (Anglers)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hake	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of Round Fish	7,455	2,276	22,569	4,191	2,177	1,178	38,589	11,480	63,335	16,849	..	..	2,642	793	3,321	74	5,963	867	76,753	19,992	92,695	25,375

(b) FLAT.																						
Turbot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Halibut	1	1	158	195	140	229	530	754	828	1,178	..	..	..	..	..	..	..	..	829	1,179	953	1,611
Lemon Soles	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	1	1
Flounders	..	..	..	..	..	..	40	20	40	20	..	..	..	..	..	..	..	..	40	20	26	13
Plaice, Large, ,, Medium, ,, Small	4	6	..	..	..	..	29	16	29	16	..	..	..	..	..	..	..	..	33	22	44	25
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dabs	31	21	..	..	..	..	320	146	320	146	..	..	..	..	..	..	..	..	351	167	312	139
Whitches	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Megrims	6	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	4	..	..
Total of Flat Fish	45	35	158	195	140	229	919	936	1,217	1,360	..	..	..	..	..	..	..	..	1,262	1,395	1,336	1,789
Skates and Rays	17	6	315	62	34	5	482	123	831	190	..	..	..	..	..	..	..	..	848	196	1,298	213
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total for 1913	7,517	2,317	23,042	4,448	2,351	1,412	39,990	12,539	65,383	18,399	812,895	401,786	6,505	2,363	219,588	115,048	1,038,988	519,197	1,111,888	539,913	2,037,964	775,209
Total for 1912	17,820	5,025	18,796	3,543	..	18,708	58,313	..	77,109	22,251	1,637,602	641,855	..	106,078	305,433	..	1,943,035	747,933	2,037,964	775,209	..	..
Increase in 1913	..	..	4,246	905	..	..	..	..	..	..	..	..	..	11,333	..	..	..	..	..	..	..	..
Decrease in 1913	10,303	2,708	..	..	..	4,757	15,972	..	11,726	3,852	824,707	240,069	..	..	79,340	..	904,047	228,736	926,076	235,296	..	..

SHELL-FISH.

Oysters.		Lobsters.		Crabs.		Mussels.		Clams.		Unclassified.		
No.	£	No.	£	No.	£	Cwt.	£	Cwt.	£	Cwt.	£	–
200	1	82,210	6,311	104,450	533	300	15	..	..	3,589	728	

	£
Total Value of Shell-Fish for 1913 ..	7,588
,, ,, 1912 ..	5,572
Increase in 1913	2,016

Grand Total Value of Fish and Shell-Fish for 1913, £547,501
,, ,, ,, 1912, 780,781
Decrease in 1913, £233,280

APPENDIX B.—No. II.—FISH LANDED.—STATEMENT of the Total Quantity and Value of the different kinds of White and Shell-Fish landed on **West Coast** in the Year 1913.

KINDS OF FISH.	TRAWLS. Steam. Quantity.	TRAWLS. Steam. Value.	LINES. Steam. Quantity.	LINES. Steam. Value.	LINES. Motor. Quantity.	LINES. Motor. Value.	LINES. Sailing. Quantity.	LINES. Sailing. Value.	LINES. TOTAL. Quantity.	LINES. TOTAL. Value.	NETS. Steam. Quantity.	NETS. Steam. Value.	NETS. Motor. Quantity.	NETS. Motor. Value.	NETS. Sailing. Quantity.	NETS. Sailing. Value.	NETS. TOTAL. Quantity.	NETS. TOTAL. Value.	1913. Grand Total Quantity and Value. Cwt.	1913. Grand Total Quantity and Value. £	1912. Grand Total Quantity and Value. Cwt.	1912. Grand Total Quantity and Value. £
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£				
PELAGIC FISH.																						
Herrings	..	..	..	..	..	..	..	..	..	..	618,577	214,780	236,396	105,273	189,633	92,646	1,044,606	412,699	1,044,606	412,699	713,673	271,483
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	32	116	32	116	32	116	18	79
Mackerel	..	..	..	..	..	..	2	1	2	1	3,834	618	8,136	1,377	12,922	1,687	24,892	3,682	24,894	3,683	27,451	4,006
Total of Pelagic Fish	..	..	..	..	..	..	2	1	2	1	622,411	215,398	244,532	106,650	202,587	94,449	1,069,530	416,497	1,069,532	416,498	741,142	275,568
DEMERSAL FISH.																						
(a) ROUND.																						
Cod / Codling	307	142	7,922	2,967	3,668	1,668	17,885	7,386	29,475	12,021	351	186	1,140	397	9,946	3,213	11,437	3,796	41,219	15,959	45,977	16,530
Ling	6	3	7,066	3,361	661	366	16,320	5,127	24,047	8,854	..	..	2	1	18	6	20	7	24,073	8,864	35,637	12,205
Torsk (Tusk)	..	..	132	43	4	1	1,680	337	1,816	381	..	..	..	..	..	..	..	..	1,816	381	2,284	448
Saithe (Coal Fish)	16	3	3,099	508	278	45	20,755	2,870	24,132	3,423	34	8	1,452	211	6,590	1,010	8,076	1,229	32,224	4,655	29,743	3,865
Haddocks, ex. La. / ,, Large / ,, Medium / ,, Small	476	325	2	2	940	760	12,400	5,086	13,342	5,848	..	..	..	..	1	1	1	1	13,819	6,174	19,076	8,309
Whitings	41	19	..	..	773	608	1,413	953	2,186	1,561	..	..	..	..	..	..	..	..	2,227	1,580	3,644	2,378
Conger Eels	8	3	12,253	5,562	3,296	1,330	3,826	1,576	19,375	8,468	..	..	..	..	6	3	6	3	19,389	8,474	33,786	10,237
Gurnards	..	..	..	..	..	..	930	253	930	253	..	..	..	..	..	..	..	..	930	253	2,080	554
Catfish	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	164	53
Monks (Anglers)	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	42	7
Hake	19	17	662	840	53	56	17	6	732	902	..	..	96	105	475	522	571	627	1,322	1,546	1,639	882
Total of Round Fish	876	513	31,136	13,283	9,673	4,834	75,226	23,594	116,035	41,711	385	194	2,690	714	17,036	4,755	20,111	5,663	137,022	47,887	174,072	55,468

(b) FLAT.																						
Turbot	31	125	..	..	..	..	15	14	15	14	1	3	1	4	53	145	55	152	101	291	125	279
Halibut	21	55	571	1,351	19	33	1,284	705	1,874	2,089	..	..	..	..	..	1	..	1	1,895	2,145	2,777	3,454
Lemon Soles	21	82	..	..	..	..	29	40	29	40	..	..	..	..	10	54	10	54	60	176	148	220
Flounders	201	296	..	..	14	12	3,346	1,394	3,360	1,406	..	..	110	118	596	394	706	512	4,267	2,214	5,260	2,630
Plaice, Large, Medium, Small	595	973	..	..	598	816	1,839	1,578	2 437	2,394	..	..	1,001	1,443	757	1,004	1,758	2,447	4,790	5,814	4,653	5,432
Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	5	3	5	3	5	13	27
Dabs	..	..	..	..	..	..	3	3	3	3	..	..	..	..	10	7	10	7	13	10	500	128
Whitches	8	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	6	163	62
Megrims	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	144	67
Total of Flat Fish	877	1,537	571	1,351	631	861	6,516	3,734	7,718	5,946	1	3	1,112	1,565	1,429	1,610	2,542	3,178	11,137	10,661	13,783	12,299
Skates and Rays	364	171	9,593	3,445	2,017	736	5,754	1,079	17,364	5,260	..	..	7	3	807	514	814	517	18,542	5,948	30,760	7,988
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	30	9	852	131	14	4	3,226	562	4,092	697	..	..	34	6	66	12	100	18	4,222	724	3,588	717
Total for 1913	2,147	2,230	42,152	18,210	12,335	6,435	90,724	28,970	145,211	53,615	622,797	215,595	248,375	108,938	221,925	101,340	1,093,097	425,873	1,240,455	481,718	963,345	352,040
Total for 1912	7,553	3,783	77,626	25,391	..	39,427	113,997	..	191,623	64,818	263,263	98,657	..	184,782	500,906	..	764,169	283,439	963,345	352,040	..	..
Increase in 1913	..	..	..	..	..	..	..	..	..	..	359,534	116,938	..	25,496	..	..	328,928	142,434	277,110	129,678	..	..
Decrease in 1913	5,406	1,553	35,474	7,181	..	4,022	10,938	..	46,412	11,203	..	..	..	..	30,606	..	..	..	..	..	..	..

SHELL-FISH.

Oysters.		Lobsters.		Crabs.		Mussels.		Clams.		Unclassified.	
No.	£	No.	£	No.	£	Cwt.	£	Cwt.	£	Cwt.	£
1,315,900	4,756	490,072	24,573	172,922	640	13,340	1,023	..	..	26,204	8,534

	£
Total Value of Shell-Fish for 1913 ..	39,526
" " 1912 ..	36,776
Increase in 1913	2,750

Grand Total Value of Fish and Shell-Fish for 1913, £521,241
" " " 1912, 388,816

Increase in 1913, £132,425

APPENDIX B.—No. II.—FISH LANDED.—STATEMENT of the Total Quantity and Value of the different kinds of White and Shell-Fish landed by **Foreign Vessels** in the Year 1913.

KINDS OF FISH.	TRAWLS. Steam. Quantity.	TRAWLS. Steam. Value.	LINES. Steam. Quantity.	LINES. Steam. Value.	LINES. Motor. Quantity.	LINES. Motor. Value.	LINES. Sailing. Quantity.	LINES. Sailing. Value.	LINES. TOTAL. Quantity.	LINES. TOTAL. Value.	NETS. Steam. Quantity.	NETS. Steam. Value.	NETS. Motor. Quantity.	NETS. Motor. Value.	NETS. Sailing. Quantity.	NETS. Sailing. Value.	NETS. TOTAL. Quantity.	NETS. TOTAL. Value.	1913. Grand Total Quantity and Value. Quantity.	1913. Grand Total Quantity and Value. Value.	1912. Grand Total Quantity and Value. Quantity.	1912. Grand Total Quantity and Value. Value.
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH.																						
Herrings	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	54	22
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackerel	15	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	1	13	6
Total of Pelagic Fish	17	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17	2	67	28
DEMERSAL FISH.																						
(a) ROUND.																						
Cod, Codling	335,489	106,773	..	..	..	..	30,604	14,733	30,604	14,733	..	..	..	..	..	..	..	..	366,093	121,506	315,226	87,221
Ling	6,577	2,081	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6,577	2,081	10,993	2,659
Torsk (Tusk)	31	6	..	..	..	..	80	24	80	24	..	..	..	..	..	..	..	..	111	30	10	1
Saithe (Coal Fish)	89,469	26,131	..	..	..	..	160	38	160	38	..	..	..	..	..	..	..	..	89,629	26,169	61,548	15,778
Haddocks, ex. La., Large, Medium, Small	73,497	29,473	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	73,497	29,473	62,376	22,207
Whitings	1,117	436	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,117	436	924	223
Conger Eels	10	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	1	3	..
Gurnards	170	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	170	11	41	3
Catfish	3,474	471	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3,474	471	4,031	505
Monks (Anglers)	344	65	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	344	65	309	53
Hake	60	32	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	60	32	35	23
Total of Round Fish	510,238	165,480	..	..	..	..	30,844	14,795	30,844	14,795	..	..	..	..	..	..	..	..	541,082	180,275	455,496	128,673

(*b*) FLAT.																						
Turbot	8	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	18	7	17
Halibut	2,739	3,928	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,739	3,928	2,208	2,751
Lemon Soles	829	1,074	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	829	1,074	972	1,167
Flounders	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plaice, Large, Medium, Small	2,510	2,926	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,510	2,926	2,521	3,125
Brill	9	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	18	6	10
Dabs	24	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24	9	33	8
Whitches	1,964	1,329	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,964	1,329	1,231	611
Megrims	491	238	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	491	238	656	185
Total of Flat Fish	8,574	9,540	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8,574	9,540	7,634	7,874
Skates and Rays	2,039	420	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,039	420	1,483	241
Squids	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified kinds	9,310	1,744	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9,310	1,744	4,600	939
Total for 1913	530,178	177,186	..	..	..	..	30,844	14,795	30,844	14,795	..	..	..	..	..	..	..	..	561,022	191,981	469,280	137,755
Total for 1912	433,072	122,573	14,448	5,418	..	..	21,760	9,764	36,208	15,182	..	..	..	..	..	..	..	..	469,280	137,755	..	..
Increase in 1913	97,106	54,613	..	..	..	..	9,084	5,031	..	..	..	..	..	..	..	..	..	..	91,742	54,226	..	..
Decrease in 1913	..	..	14,448	5,418	..	..	..	..	5,364	387	..	..	..	..	..	..	..	..	..	..	..	..

NOTE.—Of the above landings, 533,733 cwts., valued at £180,367, were landed at Aberdeen, mainly by German trawlers, and the remainder, 27,289 cwts., valued at £11,614, in Orkney. All the line caught fish was landed by Faroese smacks. Of the Orkney landings, the trawled fish comprised cod, 4825 cwts., saithe, 1378 cwts., and haddocks, 26 cwts.—total 6629 cwts., valued at £1671, while the line caught fish comprised cod, 20,820 cwts., tusk, 80 cwts., and saithe, 160 cwts.—total 21,060 cwts., valued at £9943.

APPENDIX B.—No. II.—FISH LANDED.—STATEMENT of the Total Quantity and Value of the different kinds of White and Shell-Fish landed in **Scotland** in the Year 1913.

KINDS OF FISH.	TRAWLS. Steam. Quantity.	TRAWLS. Steam. Value.	LINES. Steam. Quantity.	LINES. Steam. Value.	LINES. Motor. Quantity.	LINES. Motor. Value.	LINES. Sailing. Quantity.	LINES. Sailing. Value.	LINES. TOTAL. Quantity.	LINES. TOTAL. Value.	NETS. Steam. Quantity.	NETS. Steam. Value.	NETS. Motor. Quantity.	NETS. Motor. Value.	NETS. Sailings. Quantity.	NETS. Sailings. Value.	NETS. TOTAL. Quantity.	NETS. TOTAL. Value.	1913. Grand Total Quantity and Value. Quantity.	1913. Grand Total Quantity and Value. Value.	1912. Grand Total Quantity and Value. Quantity.	1912. Grand Total Quantity and Value. Value.
	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£	Cwt.	£
PELAGIC FISH.																						
Herrings	12,106	6,628	..	..	..	..	..	..	..	..	2,851,035	1,329,267	366,610	161,365	1,219,572	590,494	4,437,217	2,081,126	4,449,323	2,087,754	5,201,300	1,910,533
Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8,117	1,772	8,117	1,772	8,117	1,772	5,597	1,836
Sparlings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	305	903	305	903	305	903	400	1,063
Mackerel	5,228	2,248	..	..	..	..	104	15	104	15	29,003	2,704	12,884	2,140	27,129	3,683	69,016	7,927	74,348	10,196	48,010	8,742
Total of Pelagic Fish	17,334	8,876	..	..	..	..	104	15	104	15	2,880,038	1,331,971	379,494	163,505	1,255,123	596,252	4,514,655	2,091,728	4,532,093	2,100,619	5,255,307	1,922,204
DEMERSAL FISH.																						
(a) ROUND.																						
Cod, Codling	953,057	453,207	56,795	27,586	22,751	11,320	128,507	59,661	208,053	98,567	9,385	4,938	5,863	2,137	57,091	24,602	72,339	31,677	1,233,449	583,451	1,235,043	505,212
Ling	93,353	29,898	102,654	42,657	1,079	687	19,298	6,305	123,031	49,649	..	..	2	1	18	6	20	7	216,404	79,554	190,964	59,764
Torsk (Tusk)	2,358	758	12,567	5,100	17	3	2,423	503	15,007	5,606	..	..	..	..	..	..	..	..	17,365	6,364	16,503	5,112
Saithe (Coal Fish)	334,557	68,001	24,899	3,532	720	122	39,394	5,528	65,013	9,182	34	8	1,452	211	9,929	1,089	11,415	1,308	410,985	78,491	286,882	48,936
Haddocks, ex. La., Large, Medium, Small	645,163	487,575	300	162	10,280	10,640	74,360	51,333	84,940	62,135	..	..	..	..	1	1	1	1	730,104	549,711	953,226	575,957
Whitings	210,364	97,365	..	..	2,879	1,808	10,372	5,968	13,251	7,776	70	20	..	..	60	18	130	38	223,745	105,179	173,992	70,151
Conger Eels	663	248	12,962	5,890	3,563	1,503	4,629	2,019	21,154	9,412	..	..	..	..	126	300	126	300	21,943	9,960	36,863	11,554
Gurnards	5,697	779	..	..	45	12	1,020	270	1,065	282	..	..	..	..	..	..	..	..	6,762	1,061	8,318	1,328
Catfish	28,878	7,621	167	29	177	80	519	261	863	370	..	..	..	..	3	3	3	3	29,744	7,994	30,351	7,858
Monks (Anglers)	24,848	6,665	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24,848	6,665	22,579	5,486
Hake	17,499	14,251	774	929	53	56	17	6	844	991	..	..	96	105	475	522	571	627	18,914	15,869	20,176	12,152
Total of Round Fish	2,316,437	1,166,368	211,118	85,885	41,564	26,231	280,539	131,854	533,221	243,970	9,489	4,966	7,413	2,454	67,703	26,541	84,605	33,961	2,934,263	1,444,299	2,974,897	1,304,490

(b) Flat.																						
Turbot	3,713	12,438	6	14	..	..	17	21	23	35	1	3	1	4	53	145	55	152	3,791	12,625	4,038	13,845
Halibut	14,809	34,598	31,784	74,424	242	423	2,103	2,093	34,129	76,940	..	..	..	..	7	11	7	11	48,945	111,549	49,696	107,795
Lemon Soles	36,122	81,555	..	..	15	31	87	138	102	169	..	..	112	407	360	1,341	472	1,748	36,696	83,472	40,818	83,413
Flounders	1,029	1,421	..	..	35	30	5,716	3,141	5,751	3,171	..	..	110	118	1,349	815	1,459	933	8,239	5,525	9,729	5,742
Plaice, Large, Medium, Small	30,804	55,033	..	..	641	877	9,737	9,624	10,378	10,501	1	1	1,044	1,540	3,933	4,526	4,978	6,067	46,160	71,601	50,238	69,697
Brill	205	417	..	..	..	..	..	..	..	..	..	..	..	..	3	5	3	5	208	422	258	560
Dabs	7,942	2,812	..	..	92	64	1,821	1,124	1,913	1,188	..	..	..	..	52	39	52	39	9,907	4,039	10,601	3,849
Whitches	30,268	29,288	..	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	30,269	29,289	18,869	19,250
Megrims	18,652	22,310	19	13	..	..	..	..	19	13	..	..	..	..	..	..	..	..	18,671	22,323	17,795	18,462
Total of Flat Fish	143,544	239,872	31,809	74,451	1,025	1,425	19,482	16,142	52,316	92,018	2	4	1,267	2,069	5,757	6,882	7,026	8,955	202,886	340,845	202,042	322,613
Skates and Rays	63,526	15,016	61,119	17,587	2,514	959	7,226	1,633	70,859	20,179	..	..	7	3	1,106	619	1,113	622	135,498	35,817	144,010	37,085
Squids	28	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	28	3	157	57
Unclassified kinds	18,413	2,856	912	137	14	4	3,517	682	4,443	823	..	..	34	6	692	92	726	98	23,582	3,777	10,693	2,135
Total for 1913	2,559,282	1,432,991	304,958	178,060	45,117	28,619	310,868	150,326	660,943	357,005	2,889,529	1,336,941	388,215	168,037	1,330,381	630,386	4,608,125	2,135,364	7,828,350	3,925,360	8,587,106	3,588,584
Total for 1912	2,402,756	1,236,943	366,284	188,400	..	469183	205,984	..	835,467	394,384	3,160,507	1,214,752	..	742,505	2,188,376	..	5,348,883	1 957,257	8,587,106	3,588,584	..	..
Increase in 1913	156,526	196,048	..	..	..	..	..	..	..	..	..	122,189	..	55,918	..	..	..	178,107	..	336,776	..	..
Decrease in 1913	..		61,326	10,340	..	113198	27,039	..	174,524	37,379	270,978	..	..	..	469,780	..	740,758	..	758,756	..	..	..

SHELL-FISH.

Oysters.		Lobsters.		Crabs.		Mussels.		Clams.		Unclassified.	
No.	£	No.	£	No.	£	Cwt.	£	Cwt.	£	Cwt.	£
1,316,100	4,757	681,059	36,775	2,213,866	14,170	78,576	4,371	6,853	1,024	41,074	11,260

	£
Total Value of Shell-Fish for 1913 ..	72,357
" " 1912 ..	67,594
Increase in 1913	4,763

Grand Total Value of Fish and Shell-Fish for 1913, £3,997,717
" " " 1912, 3,656,178
Increase in 1913, £341,539

APPENDIX C.

FISH USED IN A FRESH STATE.—Table showing the Estimated Quantity of each species of Fish consumed fresh in Scotland, or dispatched from Scotland in a fresh state, in the year 1913.

Description of Fish.	1913. Quantity.	1912. Quantity.
	Cwts.	Cwts.
Herrings	* 203,565	* 334,232
Sprats	6,013	2,024
Sparlings	305	400
Mackerel	54,361	36,835
Cod and Codlings	499,485	411,712
Ling	95,519	72,340
Torsk (Tusk)	4,443	5,771
Saithe	100,511	95,405
Haddocks	447,655	427,772
Whitings	128,403	74,767
Conger Eels	21,943	36,863
Gurnards	6,762	8,318
Catfish	21,624	13,881
Monks	† 696	11,329
Hake	18,914	20,176
Squids	28	157
Turbot	3,791	4,038
Halibut	48,945	49,696
Lemon Soles	36,696	40,818
Flounders	8,239	9,729
Plaice	46,160	50,238
Brill	208	258
Dabs	9,907	10,601
Witches and Megrims	48,800	36,414
Skates and Rays	135,498	144,010
Unclassified kinds	13,382	10,213
Total	1,961,853	1,907, 97

* Exclusive of herrings exported sprinkled or iced.
† Exclusive of monks exported fresh.

APPENDIX D.—No. I.

FISH CURED.—RETURN showing the Quantity of each Species of Fish Cured, and the Mode of Cure, in the year 1913.

No.	DISTRICTS.	HERRINGS.					
		Barrels Gutted.	Barrels Un-gutted.	Barrels Kip-pered.	Barrels of Bloa-ters or Reds.	Barrels Tinned.	Total Number of Barrels.
	EAST COAST.						
1	Eyemouth . . .	134,853	853	54,028	2,610	4,991	197,335
2	Leith	1,016	..	5,156	420	..	6,592
3	Anstruther . . .	10,141	..	309	673	..	11,123
4	Montrose . . .	3,180	..	310	134	502	4,126
5	Stonehaven . . .	36	..	190	70	..	296
6	Aberdeen . . .	49,190	..	13,806	5,368	35,513	103,877
7	Peterhead . . .	259,191	..	17,206	2	1,301	277,700
8	Fraserburgh . . .	211,307	..	11,923	..	7,645	230,875
9	Banff	5,724	..	506	..	..	6,230
10	Buckie	6,251	..	..	..	..	6,251
11	Findhorn . . .	2,773	..	..	..	..	2,773
12	Cromarty . . .	..	..	..	..	..	..
13	Helmsdale . . .	..	..	..	..	..	..
14	Lybster . . .	650	..	..	..	..	650
15	Wick	133,074	..	4,679	25	..	137,778
	East Coast Totals carried down . .	817,386	853	108,113	9,302	49,952	985,606
	Orkney and Shetland.						
16	Orkney	112,450	..	233	..	..	112,683
17	Shetland . . .	245,476	..	3,980	..	..	249,456
	Orkney and Shetland Totals carried down	357,926	..	4,213	..	..	362,139
	WEST COAST.						
18	Stornoway . . .	133,089	9,229	22,060	..	..	164,378
19	Barra	44,042	..	..	..	..	44,042
20	Loch Broom . . .	5,024	..	..	..	..	5,024
21	Loch Carron and Skye .	6,861	..	..	..	..	6,861
22	Fort-William . . .	9,412	..	1,288	..	..	10,700
23	Campbeltown . .	5,140	..	178	..	..	5,318
24	Inveraray . . .	246	..	..	..	..	246
25	Rothesay . . .	260	..	404	..	..	664
26	Greenock . . .	13,575	..	17,676	87	..	31,338
27	Ballantrae . . .	..	..	110	..	..	110
	West Coast Totals carried down . .	217,649	9,229	41,716	87	..	268,681
	Totals brought down.						
	East Coast . . .	817,386	853	108,113	9,302	49,952	985,606
	Orkney and Shetland . .	357,926	..	4,213	..	..	362,139
	West Coast . . .	217,649	9,229	41,716	87	..	268,681
	Grand Totals for 1913 .	1,392,961	10,082	154,042	9,389	49,952	1,616,426
	Grand Totals for 1912 .	1,539,483	1,642	147,948	9,502	53,570	1,752,145
	Increase in 1913 . .	..	8,440	6,094	..	..	..
	Decrease in 1913 . .	146,522	..	..	113	3,618	135,719

Note 1.—Of the quantity cured, gutted, 790 barrels were cured at sea, 5 vessels of 251 tons, and employing 29 men, having been fitted out for that purpose.

Note 2.—The above figures represent the quantity cured "bungpacked," *i.e.* as finally ready for export. The corresponding equivalents in the "seastick" state, *i.e.* before the herrings have "pined" or settled down in the barrels, will be found under Appendix D. No II.

APPENDIX D.—No. I.—*continued.*

FISH CURED.—RETURN showing the Quantity of each Species of Fish Cured, and the Mode of Cure, in the year 1913.

Other Kinds.						
Description of Fish.	Dried. cwts.	Smoked cwts.	Pickled cwts.	Tinned cwts.	Total 1913. cwts.	Total 1912. cwts.
Cod . .	161,722	120,733	3,279	56	285,790	323,506
Ling . .	38,810	1,950	222	..	40,982	40,579
Tusk . .	4,164	550	16	..	4,730	5,366
Saithe . .	66,523	55,360	78	..	121,961	76,591
Haddocks .	13,437	120,124	..	1,260	134,821	233,535
Whitings .	..	47,671	..	..	47,671	44,100
Catfish . .	..	4,060	..	..	4,060	5,490
Monks . .	..	1,850	..	..	1,850	3,750
Flatfish . .	..	110	..	..	110	250
Mackerel .	..	..	5,266	7,578	12,844	9,435
Sprats . .	..	..	1,315	..	1,315	2,962
Unclassified .	..	5,100	..	..	5,100	2,160
Total .	284,656	357,508	10,176	8,894	661,234	747,724

NOTE.—The quantities given above represent the weight after cure.

APPENDIX D.—No. II.

HERRINGS CURED.—STATEMENT showing the Number of Barrels of Herrings Cured Gutted and Ungutted, on the East and West Coasts of Scotland, for the Hundred and three years ended 31st December 1913.

Year ended	* East Coast.			West Coast.			Grand Total.
	Gutted.	Ungutted, Kippered, &c.	Total.	Gutted.	Ungutted, Kippered, &c.	Total.	
6th April 1811	2,008½	6,630	8,638½	62,186	19,110	81,296	89,934½
,, 1812	4,325½	10,332	14,657½	65,922	24,518	90,440	105,097½
,, 1813	9,179	20,950½	30,129½	76,561¾	31,025½	107,587¼	137,716¾
,, 1814	9,503	46,800½	56,303½	37,969	5,773	43,742	100,045½
,, 1815	24,314	36,827	61,141	76,021¼	7,756	83,777¼	144,918¼
,, 1816	55,411½	18,416½	73,828	73,292½	2,578¼	75,870¾	149,698¾
,, 1817	90,710½	26,252½	116,963	60,581½	3,233½	63,815	180,778
,, 1818	118,594¾	8,287¼	126,882	76,765	4,491½	81,256½	208,138½
,, 1819	221,959½	22,158	244,117½	75,197½	6,441	81,638½	325,756
,, 1820	267,556½	27,391½	294,948	72,629½	4,512	77,141½	372,089½
,, 1821	318,473½	23,909¼	342,382¾	88,626½	2,613	91,239½	433,622¼
,, 1822	229,070	12,808¾	241,878¾	56,342½	1,328	57,670½	299,549¼
,, 1823	183,687	15,256¼	198,943¼	34,211	245½	34,456½	233,399¾
,, 1824	272, 340½	32,402	304,742½	52,792	802¼	53,594¼	358,336¾
,, 1825	227,667	28,849¾	256,516¾	64,623	593	65,216	321,732¾
,, 1826	289,101	31,703¼	320,804¼	42,602	121	42,723	363,527¼
,, 1827	211,042¾	22,241½	233,284¼	43,231	117	43,348	276,632¼
,, 1828	287,906½	37,882½	325,789	45,632	2 ,039½	47,671½	373,460½
,, 1829	249,365½	41,047¼	290,412¾	47,525	945	48,470	338,882¾
,, 1830	216,427½	35,226	251,653½	59,494	639	60,133	311,786½
,, 1831	315,479	51,609¾	367,088¾	46,631	855	47,486	414,574¾
5th April 1832	259,197½	36,183½	295,381	49,216¼	3,167	52,383¼	347,764¼
,, 1833	267,928½	45,564¾	313,493¼	77,144	573	77,717	391,210¼

* Including Orkney and Shetland.

APPENDIX D.—No. II.—*continued.*

Year ended	* East Coast.			West Coast.			Grand Total.
	Gutted.	Ungutted, Kippered, &c.	Total.	Gutted.	Ungutted, Kippered, &c.	Total.	
5th April 1834	315,159	56,374¾	371,533¾	64,427½	137	64,564½	436,098¼
,, 1835	166,539½	33,339½	199,879	45,091½	633	45,724½	245,603½
,, 1836	343,693½	68,891¾	412,585¼	46,554½	479	47,033½	459,618¾
,, 1837	229,371	71,449¼	300,820¼	54,859	1,892½	56,751½	357,571¾
,, 1838	307,625	82,634¾	390,259¾	68,990½	2,374½	71,365	461,624¾
,, 1839	308,581	119,489¾	428,070¾	66,046½	1,672½	67,719	495,789¾
,, 1840	345,074½	103,160	448,234½	54,208½	343	54,551½	502,786
,, 1841	334,539	78,225¼	412,764¼	87,562½	3,402½	90,965	503,729¼
,, 1842	404,502½	116,675½	521,178	78,755½	2,183½	80,939	602,117
,, 1843	376,374	118,755¾	495,129¾	61,568½	1,627	63,195½	558,325¼
,, 1844	384,729	105,927½	490,656½	81,643	4,776	86,419	577,075½
5th January 1845	305,461½	72,649¼	378,110¾	80,836	901	81,737	459,847¾
,, 1846	343,927	82,607½	426,534½	64,056	3,753½	67,809½	494,344
,, 1847	343,009¾	137,296¾	480,306½	67,613	11,263	78,876	559,182½
,, 1848	323,471½	135,479	458,950½	46,636½	9,570	56,206½	515,157
,, 1849	337,450	155,654¼	493,104¼	52,473	6,981	59,454	552,558¼
,, 1850	427,138	152,530	579,668	77,171½	25,029¾	102,201¼	681,869¼
,, 1851	320,493	129,532¾	450,025¾	57,694	21,134	78,828	528,853¾
,, 1852	348,573	109,933	458,506	68,660¼	36,220¾	104,881	563,387
31st December 1852	331,055½	89,355	420,410½	44,623½	13,903	58,526½	478,937
,, 1853	482,017	165,459¼	647,476¼	78,350	28,431½	106,781½	754,257¾
,, 1854	410,332	132,977½	543,309½	48,247½	31,207½	79,455	622,764½
,, 1855	505,481¾	136,687½	642,169¼	77,175½	32,631	109,806½	751,975¾
,, 1856	396,650	92,400½	489,050½	69,755½	32,492½	102,248	591,298½
,, 1857	390,775	59,712½	450,487½	74,447½	25,763½	100,211	550,698½
,, 1858	410,524¾	111,440¾	521,965½	59,868½	23,350	83,218½	605,184
,, 1859	308,518¼	55,584	364,102¼	72,541	20,487	93,028	457,130¼

* Including Orkney and Shetland.

APPENDIX D.—No. II.—*continued.*

Year ended	* East Coast.			West Coast.			Grand Total.
	Gutted.	Ungutted, Kippered, &c.	Total.	Gutted.	Ungutted, Kippered, &c.	Total.	
31st December 1860	424,201½	103,086¼	527,287¾	71,894	37,891½	109,785½	637,073¼
,, 1861	447,931½	97,207	545,138½	71,241½	34,336½	105,578	650,716½
,, 1862	536,602½	88,911	625,513½	119,257½	52,685	171,942½	797,456
,, 1863	445,596½	75,511¾	521,108¼	61,396½	26,810	88,206½	609,314¾
,, 1864	378,752	88,107¾	466,859¾	99,737½	42,889	142,626½	609,486¼
,, 1865	374,424	73,814½	448,238½	95,920½	57,207	153,127½	601,366
,, 1866	398,358	72,420¼	470,778¼	99,396½	74,431	173,827½	644,605¾
,, 1867	492,172¼	81,978½	574,150¾	139,547¼	90,392	229,939¼	804,090
,, 1868	363,922½	62,906	426,828½	81,546	129,886¼	211,432¼	638,260¾
,, 1869	395,500½	61,809¾	457,310¼	93,330½	124,502¼	217,832¾	675,143
,, 1870	508,805½	98,318	607,123½	148,254	77,783	226,037	833,160½
,, 1871	585,172	94,178	679,350	83,317½	62,808¼	146,125¾	825,475¾
,, 1872	623,443½	62,341	685,784½	48,260	39,815	88,075	773,859½
,, 1873	710,376½	96,983½	807,360	86,525½	45,348	131,873½	939,233½
,, 1874	789,345½	77,489¾	866,835¼	97,657	36,068¾	133,725¾	1,000,561
,, 1875	774,293½	67,729	842,022½	60,529	40,428½	100,957½	942,980
,, 1876	454,164	59,230	513,394	32,074½	52,729	84,803½	598,197½
,, 1877	618,116¾	65,529¼	683,646	98,754½	65,318¼	164,072¾	847,718
,, 1878	702,433½	70,927½	773,361	69,122½	63,284½	132,407	905,768
,, 1879	563,754	62,833½	626,587½	92,237	122,971½	215,208½	841,796
,, 1880	1,096,953½	104,151½	1,201,105	127,245	145,250¼	272,495¼	1,473,600¼
,, 1881	830,751½	73,602¼	904,353¾	84,346½	122,455	206,801½	1,111,155¼
,, 1882	879,243½	98,983	978,226½	101,512	203,235	304,747	1,282,973½
,, 1883	960,428½	87,477¼	1,047,905¾	72,658½	148,848¼	221,506¾	1,269,412½
,, 1884	1,323,989½	132,061¼	1,456,050¾	128,223½	112,803	241,026½	1,697,077¼
,, 1885	1,244,259	74,723½	1,318,982½	108,190	145,779¾	253,969¾	1,572,952¼
,, 1886	1,017,152	125,287¾	1,142,439¾	76,211	93,572½	169,783½	1,312,223¼

* Including Orkney and Shetland.

APPENDIX D.—No. II.—*continued.*

Year ended	* East Coast.			West Coast.			Grand Total.
	Gutted.	Ungutted, Kippered, &c.	Total.	Gutted.	Ungutted, Kippered, &c.	Total.	
31st December 1887	962,116	127,588	1,089,704	101,937¾	111,782½	213,720¼	1,303,424¼
,, 1888	790,458	82,155¼	872,613¼	116,542	129,717	246,259	1,118,872¼
,, 1889	1,071,686	112,171	1,183,857	105,417	108,233	213,650	1,397,507
,, 1890	1,042,089	81,218½	1,123,307½	142,340½	38,955	181,295½	1,304,603
,, 1891	797,219	61,427	858,646	208,024	59,402	267,426	1,126,072
,, 1892	1,012,452	82,267	1,094,719	125,299	37,924	163,223	1,257,942
,, 1893	1,177,365	110,236	1,287,601	90,977	30,960¼	121,937¼	1,409,538¼
,, 1894	1,312,926	98,783	1,411,709	91,489	14,879	106,368	1,518,077
,, 1895	1,314,225	79,695	1,393,920	114,902	19,312	134,214	1,528,134
,, 1896	1,232,549	101,098	1,333,647	132,234	26,035	158,269	1,491,916
,, 1897	732,454	72,457	804,911	143,319	41,212	184,531	989,442
,, 1898	1,500,533	92,883½	1,593,416½	174,743	37,188	211,931	1,805,347
,, 1899	912,841	71,512	984,353	154,768	36,534	191,302	1,175,655
,, 1900	968,077	98,673	1,066,750	156,522	32,333	188,855	1,255,605
,, 1901	1,334,010	118,173	1,452,183	109,056	44,646	153,702	1,605,885
,, 1902	1,507,138	125,933	1,633,071	123,437	46,651	170,088	1,803,159
,, 1903	1,331,664	138,949	1,470,613	105,654	42,543	148,197	1,618,810
,, 1904	1,737,345	170,510	1,907,855	102,548	52,571	155,119	2,062,974
,, 1905	1,766,734	164,098	1,930,832	112,156	68,613	180,769	2,111,601
,, 1906	1,679,947	166,011	1,845,958	116,343	35,561	151,904	1,997,862
,, 1907	2,181,017	189,892	2,370,909	147,945	59,414	207,359	2,578,268
,, 1908	1,787,835	183,495	1,971,330	163,931	64,808	228,739	2,200,069
,, 1909	1,507,914	180,740	1,688,654	148,410	53,201	201,611	1,890,265
,, 1910	1,934,320	211,236	2,145,556	145,628	37,690	183,318	2,328,874
,, 1911	1,667,432	207,335	1,874,767	139,272	32,708	171,980	2,046,747
,, 1912	1,660,972	178,116	1,839,088	148,414	34,945	183,359	2,022,447
,, 1913	1,407,323	172,591	1,579,914	253,804	52,878	306,682	1,886,596

* Including Orkney and Shetland.

APPENDIX E.—No. I.

CURED FISH BRANDED.—RETURN showing the Number of Barrels of Cured Herrings Branded, distinguishing the different Brands, and the amount of Brand Fees Collected, during the Year 1913.

No.	DISTRICTS.	NUMBER OF BARRELS OF CURED HERRINGS BRANDED.								Fees Received.	DISTRICTS.	No.
		La. Full.	Full.	Mat. Full.	Filling.	Mattie.	La. Spent.	Spent.	Total.	£ s. d.		
	EAST COAST.										**EAST COAST.**	
1	Eyemouth	52	3,073	2,574½	266½	4,618	652½	102	11,338½	188 19 6	Eyemouth.	1
2	Leith	..	..	..	..	..	..	..	..	..	Leith.	2
3	Anstruther	..	690	522	94	1,018	144½	..	2,468½	41 2 10	Anstruther.	3
4	Montrose	2½	381½	473	73½	1,279½	61½	..	2,271½	37 17 2	Montrose.	4
5	Stonehaven	..	6	12½	..	9	..	..	27½	0 9 2	Stonehaven.	5
6	Aberdeen	1,074½	6,817½	773	302½	3,835½	225½	7	13,035½	217 5 2	Aberdeen.	6
7	Peterhead	9,053½	31,221	5,226½	3,301	21,440½	188	..	70,430½	1,173 16 10	Peterhead.	7
8	Fraserburgh	5,555½	27,834½	11,009	3,436½	15,109	532	7	63,483½	1,058 1 2	Fraserburgh.	8
9	Banff	..	149	128	..	28	56	..	361	6 0 4	Banff.	9
10	Buckie	159½	456	433½	..	90½	89	..	1,228½	20 9 6	Buckie.	10
11	Findhorn	15½	977	545	27½	231½	100	..	1,896½	31 12 2	Findhorn.	11
12	Cromarty	..	..	..	..	..	..	..	..	..	Cromarty.	12
13	Helmsdale	..	..	..	..	..	..	..	..	..	Helmsdale.	13
14	Lybster	..	53	212	..	148	..	..	413	6 17 8	Lybster.	14
15	Wick	4,767	17,386	12,100½	19	2,040½	491	43	36,847	614 2 4	Wick.	15
	East Coast Totals carried down	20,680	89,044½	34,009½	7,520½	49,848	2,540	159	203,801½	3,396 13 10	East Coast Totals carried down.	
	Orkney and Shetland.										**Orkney and Shetland.**	
16	Orkney	14,918	12,721	5,329½	121	1,569½	286	..	34,945	582 8 4	Orkney.	16
17	Shetland	6,980	784	2	82	10	..	..	7,858	130 19 4	Shetland.	17
	Orkney and Shetland Totals carried down	21,898	13,505	5,331½	203	1,579½	286	..	42,803	713 7 8	Orkney and Shetland Totals carried down.	
	Totals brought down.										**Totals brought down.**	
	East Coast	20,680	89,044½	34,009½	7,520½	49,848	2,540	159	203,801½	3,396 13 10	East Coast.	
	Orkney and Shetland	21,898	13,505	5,331½	203	1,579½	286	..	42,803	713 7 8	Orkney and Shetland.	
	Grand Totals for 1913	42,578	102,549½	39,341	7,723½	51,427½	2,826	159	246,604½	4,110 1 6	Grand Totals for 1913.	
	Grand Totals for 1912	13,085	75,427½	18,998	..	56,561½	10,716	100	174,888	2,914 16 0	Grand Totals for 1912.	
	Increase in 1913	29,493	27,122	20,343	7,723½	..	..	59	71,716½	1,195 5 6	Increase in 1913	
	Decrease in 1913	..	..	..	..	5,134	7,890	..	..	..	Decrease in 1913.	

APPENDIX E.—No. II.

FISH EXPORTED.—RETURN showing the Total Quantity of Fish Exported to England, Ireland, the Continent, and Places out of Europe during the Year 1913.

I.—HERRINGS.

Description of Fish.	Where Sent.					
	England.	Ireland.	The Continent.	Places out of Europe.	Total 1913.	Total 1912.
Scottish Cured Herrings.						
Branded :—	Barrels.	Barrels.	Barrels.	Barrels.	Barrels.	Barrels.
La. Full . . .	..	..	33,721	..	33,721	13,146
Full	100	..	95,218	..	95,318	76,456
Mat. Full . . .	100	..	36,562	..	36,662	16,838
Filling . . .	..	..	4,648	..	4,648	..
Mattie . . .	..	..	46,791	..	46,791	54,170
La. Spent . . .	..	..	2,131	..	2,131	9,802
Spent . . .	..	..	207	..	207	237
Total Branded . .	200	..	219,278	..	219,478	170,649
Unbranded . . .	4,178	2,638	1,054,984	104,045	1,165,845	1,367,700
Total Cured . . .	4,378	2,638	1,274,262	104,045	1,385,323	1,538,349
Herrings Sprinkled or Iced	..	..	25,614	..	25,614	31,222
Grand Totals for 1913 .	4,378	2,638	1,299,876	104,045	1,410,937	1,569,571
Grand Totals for 1912 .	3,298	987	1,471,815	93,471	1,569,571	..
Increase in 1913 . .	1,080	1,651	..	10,554	..	..
Decrease in 1913 . .	..	..	171,939	..	158,634	..

NOTE.—In addition to the above, there were 13,095 barrels of Irish herrings shipped *via* Glasgow to America.

II.—OTHER KINDS.

Cod, ling, &c., dried, cwts.	..	16,552	112,147	55,076	183,775	169,812
Do. pickled, brls.	113	..	248	..	361	645
Mackerel, ,, ,,	..	..	975	1,646	2,621	3,295
Sprats, ,, ,,	..	..	526	..	526	725

NOTE.—In addition to the above, 8,372 cwts. of monks (headed and gutted), valued at £4,186, were exported (to the Continent) in a fresh state ; and 91,686 cases of preserved fish (90,087 to America and 1,599 to Australia).

APPENDIX E.—No. III.

DESTINATION OF EXPORTS.—(1) STATEMENT showing the Ports or Places to which the Herrings exported to the Continent were shipped.

Destination.	From East Coast.	From Orkney & Shetland.	From West Coast.	Total 1913.	Total 1912.
	Barrels.	Barrels.	Barrels.	Barrels.	Barrels.
Germany :—					
Stettin. . .	194,555	56,136	12,442	263,133	231,694
Hamburg . .	138,837	56,735	..	195,572	194,050
Königsberg . .	100, 989	32,387	6,625	140,001	178,574
Danzig . .	70,331	3,664	..	73,995	114,690
Bremen . .	..	..	..	..	5
Total . .	504,712	148,922	19,067	672,701	719,013
Russia :—					
St. Petersburg .	112,987	99,480	63,082	275,549	364,651
Libau . . .	161,332	43,737	15,803	220,872	281,630
Riga . . .	92,420	3,951	8,113	104,484	86,415
Revel . . .	6,518	..	1,949	8,467	3,840
Wyborg . .	4,950	..	..	4,950	9,570
Port Baltic . .	3,816	..	..	3,816	2,492
Helsingfors . .	1,542	..	..	1,542	1,549
Windau . .	..	..	..	..	40
Total . .	383,565	147,168	88,947	619,680	750,187
Holland :—					
Rotterdam . .	2,787	..	3,190	5,977	1,678
Antwerp . .	79	..	..	79	76
Harlingen . .	..	..	..	..	25
Total . .	2,866	..	3,190	6,056	1,779
Norway, Sweden, and Denmark .	146	..	1,293	1,439	695
Faroe . . .	..	..	..	..	141
Grand Totals for 1913	981,289	296,090	112,497	1,299,876	1,471,815
Grand Totals for 1912	858,448	582,747	30,620	1,471,815	..
Increase in 1913. .	32,841	..	81,877	..	..
Decrease in 1913 .	..	286,657	..	171,939	..

APPENDIX E.—No. III.—*continued.*

DESTINATION OF EXPORTS—(2) RETURN showing, by Districts, the Direct Exports of Cured Herrings to Germany and Russia respectively, during 1913.

Districts.	Germany.	Russia.
East Coast.	Barrels.	Barrels.
Eyemouth	84,088	45,304
Leith	166,148	33,594
Anstruther	6,004	..
Montrose	4,755	..
Stonehaven	..	..
Aberdeen	47,098	14,392
Peterhead	69,752	130,236
Fraserburgh	53,682	119,606
Banff	1,014	..
Buckie	..	597
Findhorn	..	..
Cromarty	..	..
Helmsdale	..	..
Lybster	..	..
Wick	72,171	39,836
Total, East Coast	504,712	383,565
Orkney and Shetland.		
Orkney	53,664	35,874
Shetland	95,258	111,294
Total, Orkney and Shetland	148,922	147,168
West Coast.		
Stornoway	18,689	67,432
Barra	..	21,515
Loch Broom	378	..
Loch Carron and Skye	..	..
Fort William	..	..
Campbeltown	..	..
Inveraray	..	..
Rothesay	..	..
Greenock	..	..
Ballantrae	..	..
Total, West Coast	19,067	88,947
Grand Total for 1913	672,701	619,680
Grand Total for 1912	719,013	750,187
Increase in 1913	..	..
Decrease in 1913	46,312	130,507

APPENDIX E.—

VALUE OF CURED FISH.—RETURN showing the estimated Value &c., during the

DISTRICTS.	VALUE OF CURED HERRINGS BRANDED.							
	La. Full.	Full.	Mat. Full.	Filling.	Eattie.	La. Spent.	Spent.	Total Branded.
EAST COAST.	£	£	£	£	£	£	£	£
Eyemouth . . .	110	5,853	4,587	494	7,642	944	144	19,774
Leith	..	..	..	..	..	..	..	..
Anstruther . . .	..	1,380	966	169	1,628	217	..	4,360
Montrose . . .	5	724	828	154	2,111	92	..	3,914
Stonehaven . . .	..	11	22	..	15	..	..	48
Aberdeen . . .	2,149	13,625	1,441	544	6,520	338	9	24,626
Peterhead . . .	1,918	65,564	9,930	6,272	36,449	291	..	138,424
Fraserburgh . .	11,805	57,060	21,192	6,744	26,440	878	11	124,130
Banff	..	305	243	..	46	88	..	682
Buckie. . . .	320	912	824	..	136	124	..	2,316
Findhorn . . .	27	1,710	899	47	359	140	..	3,182
Cromarty . . .	..	..	..	..	..	..	..	..
Helmsdale . . .	..	..	..	..	..	..	..	..
Lybster . . .	..	106	392	..	248	..	..	746
Wick	9,772	34,772	22,385	36	3,519	785	69	71,338
East Coast Totals carried down . . .	44,106	182,022	63,709	14,460	85,113	3,897	233	393,540
Orkney and Shetland.								
Orkney . . .	32,820	26,714	10,392	230	2,903	458	..	73,517
Shetland . . .	14,658	1,568	4	143	15	..	..	16,388
Orkney and Shetland Totals carried down .	47,478	28,282	10,396	373	2,918	458	..	89,905
WEST COAST.								
Stornoway . . .	..	..	..	..	..	..	..	..
Barra	..	..	..	..	..	..	..	..
Loch Broom . .	..	..	..	..	..	..	..	..
Loch Carron and Skye .	..	..	..	..	..	..	..	..
Fort-William . .	..	..	..	..	..	..	..	..
Campbeltown . .	..	..	..	..	..	..	..	..
Inveraray . . .	..	..	..	..	..	..	..	..
Rothesay . . .	..	..	..	..	..	..	..	..
Greenock . . .	..	..	..	..	..	..	..	..
Ballantrae . . .	..	..	..	..	..	..	..	..
West Coast Totals carried down . .	..	..	..	..	..	..	..	..
Totals brought down.								
East Coast . . .	44,106	182,022	63,709	14,460	85,113	3,897	233	393,540
Orkney and Shetland .	47,478	28,282	10,396	373	2,918	458	..	89,905
West Coast . . .	..	..	..	..	..	..	..	..
Grand Totals for 1913 .	91,584	210,304	74,105	14,833	88,031	4,355	233	483,445
Grand Totals for 1912 .	19,221	140,250	32,389	..	80,174	14,318	126	286,478
Increase in 1913 . .	72,363	70,054	41,716	14,833	7,857	..	107	196,967
Decrease in 1913 . .	..	..	..	..	..	9,963	..	..

No. IV.

of Cured Herrings, Branded and Unbranded, as well as of Cured Cod
Year 1913.

Value of Cured Herrings Un-branded.	Grand Total of Cured Herrings.	VALUE OF CURED FISH OTHER THAN HERRINGS.					Grand Total Value of Cured Fish.
		Dried.	Pickled.	Tinned.	Smoked.	Total.	
£	£	£	£	£	£	£	£
303,979	323,753	..	..	..	2,120	2,120	325,873
10,396	10,396	..	790	..	..	790	11,186
14,672	19,032	1,186	..	..	300	1,486	20,518
3,804	7,718	..	..	184	..	184	7,902
300	348	30	..	..	630	660	1,008
157,100	181,726	308,966	95	9,650	625,835	944,546	1,126,272
402,127	540,551	1,047	..	..	2,161	3,208	543,759
297,241	421,371	525	90	3,000	2,071	5,686	427,057
10,195	10,877	...	..	..	4,152	4,152	15,029
7,414	9,730	1,719	856	..	321	2,896	12,626
1,315	4,497	1,425	..	..	370	1,795	6,292
..	..	64	..	..	394	458	458
..	..	..	..	..	295	295	295
355	1,101	..	..	..	..	..	1,101
187,061	258,399	2,904	977	..	806	4,687	263,086
1,395,959	1,789,499	317,866	2,808	12,834	639,455	972,963	2,762,462
147,842	221,359	24,450	..	..	..	24,450	245,809
405,970	422,358	12,974	2,380	..	375	15,729	438,087
553,812	643,717	37,424	2,380	..	375	40,179	683,896
239,223	239,223	6,779	1,085	..	900	8,764	247,987
114,640	114,640	333	152	..	..	485	115,125
8,545	8,545	1,958	125	..	..	2,083	10,628
13,036	13,036	153	26	..	..	179	13,215
18,106	18,106	38	339	..	..	377	18,483
10,636	10,636	95	..	..	..	95	10,731
462	462	..	..	..	..	..	462
1,490	1,490	..	..	..	..	..	1,490
74,917	74,917	306	..	..	..	306	75,223
440	440	..	..	..	..	..	440
481,495	481,495	9,662	1,727	..	900	12,289	493,784
1,395,959	1,789,499	317,866	2,808	12,834	639,455	972,963	2,762,462
553,812	643,717	37,424	2,380	..	375	40,179	683,896
481,495	481,495	9,662	1,727	..	900	12,289	493,784
2,431,266	2,914,711	364,952	6,915	12,834	640,730	1,025,431	3,940,142
2,494,653	2,781,131	301,149	9,820	450	524,702	836,121	3,617,252
..	133,580	63,803	..	12,384	116,028	189,310	322,890
63,387	..	..	2,905	..	..	..	..

APPENDIX E.—

RETURN showing, under each of the Crown Brands, the Number of Barrels of Districts for Inspection with a view to Branding if in accordance with Brand was Refused, and the Principal Grounds of Refusal.

DISTRICTS.	La. Full Brand.			Full Brand.			Mat. Full Brand.			Filling Brand.		
	Barrels presented.	Barrels refused Brand.		Barrels presented.	Barrels refused Brand.		Barrels presented.	Barrels refused Brand.		Barrel presented.	Barrels refused Brand.	
		Number.	Per cent.		Number.	Per cent.		Number.	Per cent.		Number.	Per cent.
Eyemouth .	52	..	..	3,148½	75½	2·40	3,010½	436	14·48	266½	..	..
Anstruther .	..	..	..	694	4	·58	524	2	·38	95	1	1·05
Montrose .	2½	..	..	382½	1	·26	484	11	2·27	73½	..	..
Stonehaven .	..	..	..	6	..	..	12½	..	..	..	..	..
Aberdeen .	1,082½	8	·74	6,953½	136	1·96	970	197	20·31	397	94½	23·80
Peterhead .	9,062½	9	·1	32,806½	1,585½	4·83	5,509½	283	5·14	3,867½	566½	14·65
Fraserburgh .	5,744½	189	3·29	28,272½	438	1·55	11,173	164	1·47	3,785½	349	9·22
Banff . .	..	..	..	253	104	41·11	128	..	..	..	..	..
Buckie . .	159½	..	..	479	23	4·80	450½	17	3·77	..	..	..
Findhorn .	15½	..	..	991	14	1·41	564½	19½	3·45	34½	7	20·29
Lybster . .	..	..	..	53	..	..	212	..	..	..	..	..
Wick . .	4,802	35	·73	17,547½	161½	·92	12,213½	113	·93	19	..	..
Orkney . .	14,952	34	·23	12,736	15	·12	5,367½	38	·71	121	..	..
Shetland . .	7,165½	185½	2·59	811	27	3·33	2	..	..	82	..	..
Totals for 1913	43,038½	460½	1·07	105,134	2,584½	2·46	40,621½	1,280½	3·15	8,741½	1,018	11·65
Totals for 1912	13,450½	365½	2·72	76,868	1,440½	1·87	19,666	668	3·4	..	..	..
Increase in 1913	29,588	95	..	28,266	1,144	·59	20,955½	612½	..	8,741½	1,018	11·65
Decrease in 1913	..	..	1·65	..	..	..	..	..	·25	..	..	..

No. V.

Cured Herrings, presented during 1913, to the Officers of the various Fishery
the Board's Regulations, the Number and Percentage in respect of which the

Mattie Brand.			La. Spent Brand.			Spent Brand.			Total.			Principal Grounds of Refusal.
Barrels presented.	Barrels refused Brand.		Barrels presented.	Barrels refused Brand.		Barrels presented.	Barrels refused Brand.		Barrels presented.	Barrels refused Brand.		
	Number.	Per cent.		Number.	Per cent.		Number.	Per cent.		Number.	Per cent.	
4,824	206	4·27	652½	..	..	102	..	..	12,056	717½	5·95	Defective selection and torn fish.
1,027	9	·88	144½	..	..	..	..	..	2,484½	16	·64	Inferior quality.
1,303½	24	1·84	61½	..	..	..	..	..	2,307½	36	1·56	Bad selection and inferior quality.
9	..	..	..	..	..	..	..	..	27½	..	..	..
4,121½	286	6·94	232½	7	3·01	7	..	..	13,764	728½	5·29	Defective selection and inferior quality
24 016	2 575½	10·72	248	60	24·19	..	..	..	75,510	5,079½	6·73	Torn fish and defective selection.
16,050	941	5·86	532	..	..	7	..	..	65,564½	2,081	3·17	Defective selection and inferior quality
44	16	36·36	70	14	20·00	..	..	..	495	134	27·07	Defective selection and heavy salting.
91½	1	1·09	89	..	..	..	..	..	1,269½	41	3·23	Heavy salting and bad selection.
253	21½	8·50	100	..	..	..	..	..	1,958½	62	3·17	Defective selection and cure.
150	2	1·33	..	..	..	..	..	..	415	2	·48	Soft and oily fish.
2,289½	249	10·88	492	1	·2	43	..	..	37,406½	559½	1·50	Inferior quality and defective selection.
1,639½	70	4·27	286	..	..	..	..	..	35,102	157	·62	Inferior quality and defective selection.
10	..	..	..	..	..	..	..	..	8,070½	212½	2·63	Slack filling, light salting, defective cure and inferior quality.
55,828½	4,401	7·88	2,908	82	2·82	159	..	..	256,431	9,826½	3·83	
60,525½	3,964	6·55	10,833½	117½	1·08	101	1	·99	181,444½	6,556½	3·61	
..	437	1·33	..	..	1·74	58	..	..	74,986½	3,270	·22	
4,697	..	..	7,925½	35½	..	..	1	·99	..	..	..	

APPENDIX F.—

PERSONS EMPLOYED.—RETURN showing the Total Number of branches of the Sea Fisheries

No.	DISTRICTS.	Fishermen and Boys (resident and non-resident).	Fishmongers.	Hawkers of Herring and other Fish.	Fishcurers, and Dealers in Fresh Fish.	Coopers.	Gutters, Packers, Kipperers, etc.	Clerks.	Carters and Labourers.	Persons gathering Bait and Baiting Lines.
	EAST COAST.									
1	Eyemouth . .	561	1	9	15	48	411	1	56	26
2	Leith . . .	2,104	650	500	10	56	125	58	76	40
3	Anstruther . .	1,754	20	42	20	53	450	7	31	64
4	Montrose . . .	920	171	241	22	36	220	30	88	350
5	Stonehaven . .	189	4	32	5	11	79	1	10	47
6	Aberdeen . . .	3,083*	312	310	178	387	2,994	366	2,364	38
7	Peterhead . .	1,856	11	82	92	557	1,343	58	289	30
8	Fraserburgh . .	2,029	4	120	85	451	1,325	72	444	36
9	Banff . . .	1,444	1	107	19	52	435	1	21	45
10	Buckie . . .	3,245	1	83	13	112	1,063	64	20	..
11	Findhorn . .	1,750	18	102	15	67	619	5	32	..
12	Cromarty . . .	619	..	40	3	..	240	..	8	..
13	Helmsdale . .	365	..	90	8	30	255	2	6	40
14	Lybster . . .	137	2	3	1	12	96	..	3	..
15	Wick . . .	1,451	14	60	57	447	1,070	30	192	..
	East Coast Totals carried down . .	21,507	1,209	1,821	543	2,319	10,725	695	3,640	716
	Orkney and Shetland.									
16	Orkney . . .	915	10	10	8	30	225	4	157	30
17	Shetland . . .	6,241	..	10	41	168	1,248	52	504	25
	Orkney and Shetland Totals carried down	7,156	10	20	49	198	1,473	56	661	55
	WEST COAST.									
18	Stornoway . .	4,066	26	46	34	90	2,720	9	146	..
19	Barra . . .	998	..	..	8	5	806	4	57	220
20	Loch Broom . .	993	2	18	20	4	218	3	33	18
21	Loch Carron and Skye.	939	..	..	12	8	101	..	5	250
22	Fort-William . .	463	20	28	4	3	9	..	3	51
23	Campbeltown . .	685	4	20	18	1	45	1	8	40
24	Inveraray . .	449	4	7	10	..	28	..	6	13
25	Rothesay . . .	124	46	24	3	..	14	4	8	..
26	Greenock . . .	301	633	1,005	35	34	130	89	256	54
27	Ballantrae . .	581	39	127	4	..	..	37	104	32
	West Coast Totals carried down . .	9,599	774	1,275	148	145	4,071	147	626	678
	Totals brought down.									
	East Coast . .	21,507	1,209	1,821	543	2,319	10,725	695	3,640	716
	Orkney and Shetland	7,156	10	20	49	198	1,473	56	661	55
	West Coast . .	9,599	774	1,275	148	145	4,071	147	626	678
	Grand Totals for 1913	38,262	1,993	3,116	740	2,662	16,269	898	4,927	1,449
	Grand Totals for 1912	38,434	2,031	3,186	728	2,479	16,254	825	4,426	1,388
	Increase in 1913 .	..	..	..	12	183	15	73	501	61
	Decrease in 1913 .	172	38	70	..	..	..	..	..	..

* Exclusive of 390 non-resident fishermen on foreign fishing vessels. The number of such fishermen in 1912 was 325, included in the Aberdeen total.

No. I.

Persons employed in each District in connection with the various during the year 1913.

Boxmakers.	Boat Builders.	Basketmakers.	Persons making and mending Nets.	Persons manufacturing Barrel Staves.	Persons employed on board Vessels Curing, Exporting, and Carrying Herring and other Fish.		Persons employed on board Vessels Importing Salt, Stave Wood, and Hoops.		Other Occupations.	Total Persons employed.	DISTRICTS.
					British.	Foreign.	British.	Foreign.			
											EAST COAST.
..	8	..	..	..	263	452	104	..	..	1,955	Eyemouth.
30	20	20	400	10	1,286	..	44	18	50	5,497	Leith.
..	16	..	360	13	36	15	31	48	42	3,002	Anstruther.
6	42	5	16	34	34	11	18	33	48	2,325	Montrose.
..	1	..	140	..	..	..	9	..	..	528	Stonehaven.
136	1,820	20	300	40	781	251	302	222	600	14,504	Aberdeen.
15	34	1	179	139	289	796	274	215	..	6,260	Peterhead.
6	60	2	95	28	782	798	165	403	..	6,905	Fraserburgh.
..	83	..	..	..	15	4	9	..	..	2,236	Banff.
..	112	..	132	5	25	3	13	..	..	4,891	Buckie
..	36	..	20	..	46	..	10	..	..	2,720	Findhorn.
..	5	..	6	4	3	..	..	..	..	928	Cromarty.
..	2	..	6	1	54	..	4	..	..	863	Helmsdale
..	..	..	..	..	6	..	..	..	..	260	Lybster.
10	14	5	24	10	333	739	78	337	..	4,871	Wick.
203	2,253	53	1,678	284	3,953	3,069	1,061	1,276	740	57,745	
											Orkney and Shetland.
..	18	..	..	..	214	377	50	56	20	2,124	Orkney.
..	38	..	46	8	415	693	489	240	..	10,218	Shetland
..	56	..	46	8	629	1,070	539	296	20	12,342	
											WEST COAST.
2	19	1	..	16	423	280	119	58	..	8,055	Stornoway.
..	6	..	..	..	118	87	79	..	..	2,388	Barra.
..	8	..	3	..	122	2	7	..	..	1,451	Loch Broom.
..	16	13	..	..	83	..	4	..	..	1,431	Loch Carron and Skye
..	..	..	..	..	108	..	19	..	..	708	Fort-William.
..	6	..	75	..	75	..	6	..	..	984	Campbeltown.
..	7	..	..	..	30	..	4	..	..	558	Inveraray.
..	12	..	..	..	35	..	2	..	..	272	Rothesay.
10	4	1	500	..	722	..	38	..	24	3,836	Greenock.
..	16	..	..	..	..	..	..	..	..	940	Ballantrae.
12	94	15	578	16	1,716	369	278	58	24	20,623	
											Totals brought down.
203	2,253	53	1,678	284	3,953	3,069	1,061	1,276	740	57,745	East Coast.
..	56	..	46	8	629	1,070	539	296	20	12,342	Orkney and Shetland.
12	94	15	578	16	1,716	369	278	58	24	20,623	West Coast.
215	2,403	68	2,302	308	6,298	4,508	1,878	1,630	784	90,710	Grand Totals for 1913.
216	2,408	71	2,221	219	6,637	4,268	2,151	1,504	269	89,715	Grand Totals for 1912.
..	..	..	81	89	..	240	..	126	515	995	Increase in 1913.
1	5	3	..	..	339	..	273	..	..	..	Decrease in 1913

APPENDIX F.—

RETURN by DISTRICTS of the Tonnage of Shipping, and of the Number of Seamen distinguishing those employed in importing Stave Wood and Hoops; in importing separating British from Foreign Tonnage and Men.

No.	DISTRICTS.	TONNAGE							
		Importing Stave Wood and Hoops for the Fisheries.				Importing Salt for the Fisheries.			
		British.		Foreign.		British.		Foreign.	
		Tons.	Men.	Tons.	Men.	Tons.	Men.	Tons.	Men.
	EAST COAST.								
1	Eyemouth	..	..	..	..	1,385	104	..	..
2	Leith	600	27	420	18	350	17	..	..
3	Anstruther	..	..	375	30	645	31	414	18
4	Montrose	180	7	..	..	114	11	795	33
5	Stonehaven	..	..	..	..	220	9	..	..
6	Aberdeen	3,600	144	4,150	166	4,200	158	1,700	56
7	Peterhead	1,010	33	4,983	167	4,927	241	1,864	48
8	Fraserburgh	2,322	82	6,444	258	2,570	83	4,473	145
9	Banff	..	..	..	..	226	9	..	..
10	Buckie	..	..	..	..	450	13	..	..
11	Findhorn	..	..	..	..	130	10	..	..
12	Cromarty	..	..	..	..	..	..	..	..
13	Helmsdale	23	4	..	..	..	..	..	..
14	Lybster	..	..	..	..	..	..	..	..
15	Wick	1,420	60	4,913	193	308	18	5,157	144
	East Coast Totals carried down	9,155	357	21,285	832	15,525	704	14,403	444
	Orkney and Shetland.								
16	Orkney	..	..	..	..	2,100	50	5,200	56
17	Shetland	8,453	338	4,585	185	3,715	151	1,377	55
	Orkney and Shetland Totals carried down	8,453	338	4,585	185	5,815	201	6,577	111
	WEST COAST.								
18	Stornoway	312	19	110	8	2,258	100	2,028	50
19	Barra	57	2	..	..	2,200	77	..	..
20	Loch Broom	..	..	..	..	150	7	..	..
21	Loch Carron and Skye	..	..	..	..	100	4	..	..
22	Fort-William	..	..	..	..	472	19	..	..
23	Campbeltown	..	..	..	..	150	6	..	..
24	Inveraray	..	..	..	..	100	4	..	..
25	Rothesay	..	..	..	..	40	2	..	..
26	Greenock	..	..	..	..	950	38	..	..
27	Ballantrae	..	..	..	..	..	..	..	..
	West Coast Totals carried down	369	21	110	8	6,420	257	2,028	50
	Totals brought down.								
	East Coast	9,155	357	21,285	832	15,525	704	14,403	444
	Orkney and Shetland	8,453	338	4,585	185	5,815	201	6,577	111
	West Coast	369	21	110	8	6,420	257	2,028	50
	Grand Totals for 1913	17,977	716	25,980	1025	27,760	1162	23,008	605
	Grand Totals for 1912	17,345	778	21,473	782	27,335	1373	23,046	722
	Increase in 1913	632	..	4,507	243	425	..	..	..
	Decrease in 1913	..	62	..	..	..	211	38	117

No. II.

engaged in the Trade of the Herring and Cod and Ling Fisheries of Scotland in the Year 1913, Salt; in carrying Herrings or Cod Fish Coastwise, and in exporting them abroad; and

AND MEN.

Carrying Herrings or Cod Fish Coastwise.				Exporting Herrings or Cod Fish.				Total.				Grand Total.	
British.		Foreign.		British.		Foreign.		British.		Foreign.		Tons, British and Foreign.	Men, British and Foreign.
Tons.	Men.	Tons.	Men.	Tons.	Men.	Tons.	Men.	Tons.	Men.	Tons.	Men.		
2,453	188	398	22	1,395	75	10,343	430	5,233	367	10,741	452	15,974	819
500	20	..	..	31,642	1266	..	..	33,092	1330	420	18	33,512	1,348
254	26	..	..	232	10	368	15	1,131	67	1,157	63	2,288	130
274	20	..	..	210	14	268	11	778	52	1,063	44	1,841	96
..	..	..	..	..	..	..	..	220	9	..	..	220	9
10,250	410	3,560	142	9,252	371	2,731	109	27,302	1083	12,141	473	39,443	1,556
5,922	236	1,530	49	1,336	53	18,663	747	13,195	563	27,040	1011	40,235	1,574
11,180	687	4,579	200	2,384	95	14,945	598	18,456	947	30,441	1201	48,897	2,148
346	15	..	..	..	..	100	4	572	24	100	4	672	28
630	25	..	..	..	..	60	3	1,080	38	60	3	1,140	41
1,280	46	..	..	..	..	..	..	1,410	56	..	..	1,410	56
30	3	..	..	..	..	..	..	30	3	..	..	30	3
813	54	..	..	..	..	..	..	836	58	..	..	836	58
42	6	..	..	..	..	..	..	42	6	..	..	42	6
4,039	328	2,431	92	108	5	11,751	647	5,875	411	24,252	1076	30,127	1,487
38,013	2064	12,498	505	46,559	1889	59,229	2564	109,252	5014	107,415	4345	216,667	9,359
5,074	174	..	..	1,063	40	8,501	377	8,237	264	13,701	433	21,938	697
6,000	240	..	..	3,896	167	17,152	693	22,064	896	23,114	933	45,178	1,829
11,074	414	..	..	4,959	207	25,653	1070	30,301	1160	36,815	1366	67,116	2,526
9,121	356	..	..	1,589	54	5,887	280	13,280	529	8,025	338	21,305	867
3,358	118	..	..	..	..	1,897	87	5,615	197	1,897	87	7,512	284
1,151	122	..	..	..	..	38	2	1,301	129	38	2	1,339	131
2,000	80	..	..	..	..	..	..	2,100	84	..	..	2,100	84
2,709	108	..	..	..	..	..	..	3,181	127	..	..	3,181	127
1,875	75	..	..	..	..	..	..	2,025	81	..	..	2,025	81
740	30	..	..	..	..	..	..	840	34	..	..	840	34
745	30	..	..	..	..	..	..	785	32	..	..	785	32
750	30	..	..	17,316	692	..	..	19,016	760	..	..	19,016	760
..	..	..	..	..	..	..	..	..	..	..	..	..	..
22,449	949	..	..	18,905	746	7,822	369	48,143	1973	9,960	427	58,103	2,400
38,013	2064	12,498	505	46,559	1889	59,229	2564	109,252	5014	107,415	4345	216,667	9,359
11,074	414	..	..	4,959	207	25,653	1070	30,301	1160	36,815	1366	67,116	2,526
22,449	949	..	..	18,905	746	7,822	369	48,143	1973	9,960	427	58,103	2,400
71,536	3427	12,498	505	70,423	2842	92,704	4003	187,696	8147	154,190	6138	341,886	14,285
77,110	3671	4,495	200	71,279	2930	91,699	4047	193,069	8752	140,713	5751	333,782	14,503
..	..	8,003	305	..	..	1,005	..	..	..	13,477	387	8,104	..
5,574	244	..	..	856	88	..	44	5,373	605	..	..	..	218

APPENDIX F.—No. III.

RETURN by Districts, of the Number of Lives Lost, in connection with the Sea Fisheries of Scotland, and the manner in which the Casualties happened, the Number of Boats totally wrecked, and the Value thereof, the Number of Boats damaged and the amount of Damage, and the loss on Nets and other Fishing Material lost or damaged, in the Year 1913.

No.	DISTRICTS.	Lives Lost.							Boats totally Wrecked and Value thereof.		Boats Damaged and Amount of Damage.		Loss on Boats Totally Wrecked or Damaged.	Loss on Nets and other Fishing Material Lost or Damaged.	Total Loss on Boats, Nets, &c., Lost or Damaged.	No.
		Through Foundering at Sea.	In taking Harbours.	In Collisions.	Washed Overboard.	Falling Overboard.	Knocked Overboard or killed by Sail. &c.	Total.	Number.	Value.	Number.	Amount of Damage.				
	EAST COAST.									£		£	£	£	£	
1	Eyemouth . . .	..	..	..	..	..	..	..	..	..	3	35	35	1,395	1,430	1
2	Leith	..	..	..	..	4	1	5	1	40	30	2,000	2,040	8,072	10,112	2
3	Anstruther . . .	..	..	..	..	..	1	1	3	2,410	34	1,175	3,585	2,085	5,670	3
4	Montrose . . .	..	..	..	2	1	..	3	1	15	17	610	625	2,289	2,914	4
5	Stonehaven . . .	..	..	..	..	..	..	..	..	..	5	20	20	345	365	5
6	Aberdeen . . .	..	..	..	2	..	..	2	5	11,920	552	16,191	28,111	40,185	68,296	6
7	Peterhead . . .	..	..	..	..	..	..	..	1	1,750	18	455	2,205	3,810	6,015	7
8	Fraserburgh . . .	..	..	..	..	..	..	..	1	15	18	320	335	3,100	3,435	8
9	Banff	..	..	..	..	..	..	..	..	..	1	150	150	948	1,098	9
10	Buckie . . .	..	..	..	2	1	..	3	2	720	13	7,500	8,220	2,850	11,070	10
11	Findhorn . . .	9	..	..	..	..	1	10	1	3,000	4	2,600	5,600	2,800	8,400	11
12	Cromarty . . .	..	..	..	..	..	..	..	..	..	7	48	48	364	412	12
13	Helmsdale . . .	..	..	..	..	..	..	..	..	..	5	60	60	290	350	13
14	Lybster . . .	..	..	..	..	1	..	1	..	..	..	..	..	22	22	14
15	Wick	..	..	..	..	..	..	..	..	..	10	210	210	1,620	1,830	15
	East Coast Totals carried down . . .	9	..	..	6	7	3	25	15	19,870	717	31,374	51,244	70,175	121,419	

	Orkney and Shetland.															
16	Orkney . . .	..	..	..	..	..	1	1	1	90	2	25	115	295	410	16
17	Shetland . . .	..	..	..	..	..	..	..	1	230	5	45	275	205	480	17
	Orkney and Shetland Totals carried down						1	1	2	320	7	70	390	500	890	
	WEST COAST.															
18	Stornoway . . .	..	..	..	..	1	..	1	2	400	33	188	588	1,263	1,851	18
19	Barra	..	..	..	..	..	..	..	2	325	16	148	473	792	1,265	19
20	Loch Broom . .	..	..	..	..	..	..	..	1	40	24	55	95	252	347	20
21	Loch Carron and Skye .	3	..	..	..	..	..	3	11	60	12	37	97	118	215	21
22	Fort-William . .	..	..	..	..	..	..	..	2	18	11	44	62	75	137	22
23	Campbeltown . .	..	..	..	..	..	..	..	2	14	3	30	44	170	214	23
24	Inveraray . . .	..	..	..	..	..	..	..	..	..	..	..	..	357	357	24
25	Rothesay . . .	..	..	..	..	..	..	..	..	..	..	..	..	38	38	25
26	Greenock . . .	..	..	..	..	..	..	..	..	..	..	..	..	12	12	26
27	Ballantrae . . .	..	..	..	..	..	..	..	3	42	5	35	77	190	267	27
	West Coast Totals carried down . . .	3	..	..	..	1	..	4	23	899	104	537	1,436	3,267	4,703	
	Totals brought down.															
	East Coast . . .	9	..	..	6	7	3	25	15	19,870	717	31,374	51,244	70,175	121,419	
	Orkney and Shetland .	..	..	..	..	..	1	1	2	320	7	70	390	500	890	
	West Coast . . .	3	..	..	..	1	..	4	23	899	104	537	1,436	3,267	4,703	
	Grand Totals for 1913 .	12	..	..	6	8	4	30	40	21,089	828	31,981	53,070	73,942	127,012	
	Grand Totals for 1912 .	15	4	1	5	6	..	31	61	36,629	831	27,647	64,276	69,087	133,363	
	Increase in 1913 . .	..	..	..	1	2	4	..	..	..	..	4,334	..	4,855	..	
	Decrease in 1913 . .	3	4	1	..	..	..	1	21	15,540	3	..	11,206	..	6,351	

APPENDIX G.—

BOAT-BUILDING.—RETURN for the Year 1913, showing the Number and Value of Fishing Steam from Sailing and Motor Vessels, and dividing Sailing Vessels into First, Second, and

No.	DISTRICTS.	Fishing Boats.													
		Propelled by Steam.		Propelled by Sails or Motor.										Total.	
				1st Class.				2nd Class.		3rd Class.		Total.			
		No.	Value.	45 feet keel and upwards.		30 to 45 feet keel.		18 to 30 feet keel.		Under 18 feet keel.				No.	Value.
				No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.		
	EAST COAST.		£		£				£		£		£		£
1	Eyemouth	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Leith	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Anstruther	.	.	.	.	.	.	3	480	.	.	3	480	3	480
4	Montrose	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Stonehaven	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Aberdeen	5	17,500	.	.	.	.	.	.	.	.	.	.	5	17,500
7	Peterhead	1	2,300	.	.	.	.	.	.	.	.	.	.	1	2,300
8	Fraserburgh	8	22,330	2	3,400	5	1,230	3	210	18	216	28	5,056	36	27,386
9	Banff	17	45,900	.	.	6	2,220	9	883	2	26	17	3,129	34	49,029
10	Buckie	8	20,000	.	.	.	.	1	120	.	.	1	120	9	20,120
11	Findhorn	4	10,400	.	.	6	2,280	2	125	.	.	8	2,405	12	12,805
12	Cromarty	.	.	.	.	.	.	3	280	.	.	3	280	3	280
13	Helmsdale	.	.	.	.	.	.	.	.	.	.	.	.	.	.
14	Lybster	.	.	.	.	.	.	.	.	.	.	.	.	.	.
15	Wick	.	.	.	.	1	160	4	520	1	85	6	765	6	765
	East Coast Totals carried down	43	118,430	2	3,400	18	5,890	25	2,618	21	327	66	12,235	109	130,665
	Orkney and Shetland.														
16	Orkney	.	.	.	.	.	.	1	195	12	145	13	340	13	340
17	Shetland	.	.	.	.	.	.	.	.	21	132	21	132	21	132
	Orkney and Shetland Totals carried down	.	.	.	.	.	.	1	195	33	277	34	472	34	472
	WEST COAST.														
18	Stornoway	.	.	.	.	.	.	2	44	3	51	5	95	5	95
19	Barra	.	.	.	.	.	.	2	30	1	9	3	39	3	39
20	Loch Broom	.	.	.	.	.	.	.	.	4	56	4	56	4	56
21	Loch Carron and Skye	.	.	.	.	.	.	2	22	.	.	2	22	2	22
22	Fort-William	.	.	.	.	.	.	3	62	.	.	3	62	3	62
23	Campbeltown	.	.	.	.	1	210	.	.	.	.	1	210	1	210
24	Inveraray	.	.	.	.	.	.	3	900	.	.	3	900	3	900
25	Rothesay	.	.	.	.	.	.	3	480	.	.	3	480	3	480
26	Greenock	.	.	.	.	1	320	1	290	1	30	3	640	3	640
27	Ballantrae	.	.	.	.	.	.	2	270	.	.	2	270	2	270
	West Coast Totals carried down	.	.	.	.	2	530	18	2,098	9	146	29	2,774	29	2,774
	Totals brought down														
	East Coast	43	118,430	2	3,400	18	5,890	25	2,618	21	327	66	12,235	109	130,665
	Orkney and Shetland	.	.	.	.	.	.	1	195	33	277	34	472	34	472
	West Coast	.	.	.	.	2	530	18	2,098	9	146	29	2,774	29	2,774
	Grand Totals for 1913	43	118,430	2	3,400	20	6,420	44	4,911	63	750	129	15,481	172	133,911
	Grand Totals for 1912	34	100,500	2	1,975	22	6,158	47	4,994	69	836	140	13,963	174	114,463
	Increase in 1913	9	17,930	.	1,425	.	262	.	.	.	.	.	1,518	.	19,448
	Decrease in 1913	.	.	.	.	2	.	3	83	6	86	11	.	2	.

No. I.

Boats and Trawlers constructed within the Boundaries of each District in Scotland, distinguishing Third Class; with Remarks as to any Vessels made for use outside the District or outside Scotland.

Trawlers.						Total Fishing Boats and Trawlers.							
Propelled by Steam.		Propelled by Sails or Motor.		Total.		Propelled by Steam.		Propelled by Sails or Motor.		Total.		REMARKS.	No.
No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.		
	£		£		£		£		£		£		
.	.	.	.	.	.	.	.	.	.	.	.	—	1
.	.	.	.	.	.	.	.	.	.	.	.	—	2
.	.	.	.	.	.	.	.	3	480	3	480	2 Motor boats for Montrose district.	3
.	.	.	.	.	.	.	.	.	.	.	.	—	4
.	.	.	.	.	.	.	.	.	.	.	.	—	5
31	201,500	.	.	31	201,500	36	219,000	.	.	36	219,000	5 Trawlers for Fleetwood, 4 for France, 2 for Milford Haven, 2 for Granton, 1 for Peterhead, 1 for North Shields. 2 drifters for Lowestoft, 1 each for Montrose, Buckie, and Yarmouth.	6
.	.	.	.	.	.	1	2,300	.	.	1	2,300	Drifter for North Shields.	7
.	.	.	.	.	.	8	22,330	28	5,056	36	27,386	1 Drifter for Peterhead. 1 motor boat for Buckie, 1 for Montrose, 1 for Ireland. Small boats for various districts.	8
.	.	.	.	.	.	17	45,900	17	3,129	34	49,029	2 Steamers for Aberdeen, 1 each for Fraserburgh, Portknockie, & Yarmouth. 1 sail boat each for Mallaig, Eriskay, and Barra. 1 motor boat each for Gourdon and Rosehearty.	9
.	.	.	.	.	.	8	20,000	1	120	9	20,120	4 Drifters for other districts.	10
.	.	.	.	.	.	4	10,400	8	2,405	12	12,805	2 Steam drifters for Londonderry. 1 steam drifter and 1 motor boat for Buckie. 1 sail boat for Harris.	11
.	.	.	.	.	.	.	.	3	280	3	280	—	12
.	.	.	.	.	.	.	.	.	.	.	.	—	13
.	.	.	.	.	.	.	.	.	.	.	.	—	14
.	.	.	.	.	.	.	.	6	765	6	765	—	15
31	201,500	.	.	31	201,500	74	319,930	66	12,235	140	332,165		
.	.	.	.	.	.	.	.	13	340	13	340	—	16
.	.	.	.	.	.	.	.	21	132	21	132	—	17
.	.	.	.	.	.	.	.	34	472	34	472		
.	.	.	.	.	.	.	.	5	95	5	95	—	18
.	.	.	.	.	.	.	.	3	39	3	39	—	19
.	.	.	.	.	.	.	.	4	56	4	56	—	20
.	.	.	.	.	.	.	.	2	22	2	22	—	21
.	.	.	.	.	.	.	.	3	62	3	62	For Skye district.	22
.	.	.	.	.	.	.	.	1	210	1	210	—	23
.	.	.	.	.	.	.	.	3	900	3	900	All motor boats for other districts.	24
.	.	.	.	.	.	.	.	3	480	3	480	1 for Girvan, 2 for Campbeltown.	25
.	.	.	.	.	.	.	.	3	640	3	640	1 sail and 2 motor boats for Ballantrae district.	26
.	.	.	.	.	.	.	.	2	270	2	270	—	27
.	.	.	.	.	.	.	.	29	2,774	29	2,774		
31	201,500	.	.	31	201,500	74	319,930	66	12,235	140	332,165		
.	.	.	.	.	.	.	.	34	472	34	472		
.	.	.	.	.	.	.	.	29	2,774	29	2,774		
31	201,500	.	.	31	201,500	74	319,930	129	15,481	203	335,411		
33	199,830	1	54	34	199,884	67	300,330	141	14,017	208	314,347		
.	1,670	.	.	.	1,616	7	19,600	.	1,464	.	21,064		
2	.	1	54	3	.	.	.	12	.	5	.		

APPENDIX G.—No. II.

RETURN for the Year 1913 of the Number of Barrels and the Number of Half-Barrels constructed within the Boundaries of each District in Scotland, and of the Number of Quarter-Cran Basket Measures Branded.

No.	DISTRICTS.	Number of Barrels and Half-Barrels Constructed.		Number of ¼-Cran Measures Branded.	
		Barrels.	Half-Barrels.	Boxes.	Baskets.
	EAST COAST.				
1	Eyemouth	72,783	13,344	..	915
2	Leith	25,722	25,788	..	18,172
3	Anstruther	37,950	14,827	..	..
4	Montrose	22,030	8,466	..	1,301
5	Stonehaven	7,460	300	..	..
6	Aberdeen	348,948	195,711	..	18,797
7	Peterhead	421,202	157,388	..	387
8	Fraserburgh	485,050	202,620	..	1,426
9	Banff	24,850	9,604	..	..
10	Buckie	45,300	25,000	..	..
11	Findhorn	37,700	28,260	..	..
12	Cromarty	..	..	..	..
13	Helmsdale	23,000	4,000	..	..
14	Lybster	6,935	5,763	..	..
15	Wick	231,916	145,756	..	4,883
	East Coast Totals carried down	1,790,846	836,827	..	45,881
	Orkney and Shetland.				
16	Orkney	27,200	2,800	..	..
17	Shetland	218,925	97,340	..	..
	Orkney and Shetland Totals carried down	246,125	100,140	..	..
	WEST COAST.				
18	Stornoway	18,862	25,000	..	..
19	Barra	688	..	..	..
20	Loch Broom	..	..	..	..
21	Loch Carron and Skye	..	..	..	5,135
22	Fort-William	..	..	..	..
23	Campbeltown	..	..	..	..
24	Inveraray	..	..	..	..
25	Rothesay	..	..	..	..
26	Greenock	1,470	10,005	..	.410
27	Ballantrae	..	..	..	..
	West Coast Totals carried down	21,020	35,005	..	5,545
	Totals brought down.				
	East Coast	1,790,846	836,827	..	45,881
	Orkney and Shetland	246,125	100,140	..	..
	West Coast	21,020	35,005	..	5,545
	Grand Totals for 1913	2,057,991	971,972	..	51,426
	Grand Totals for 1912	1,751,874	862,199	..	50,087
	Increase in 1913	306,117	109,773	..	1,339
	Decrease in 1913	..	..	..	..

NOTE.—Of the above total, 2,043,440 whole and 967,237 half-barrels were constructed of fir, 1000 half-barrels were constructed of larch, and 14,551 whole and 3,735 half-barrels of ash, elm, birch, alder, &c. All the barrels (and half-barrels) constructed were hooped partly with wood and partly with iron

APPENDIX

REGISTRATION OF FISHING BOATS—RETURN, by Districts, of Fishing 1883, and Sea Fisheries (Scotland)

No.	DISTRICTS.	Applications to Register.				Certificates	
		First Class.	Second Class.	Third Class.	Total.	First Class.	Second Class.
	EAST COAST.						
1	Eyemouth	..	..	..	..	..	..
2	Leith	..	..	..	..	..	..
3	Anstruther	7	3	..	10	7	3
4	Montrose	..	..	..	..	..	..
5	Stonehaven	..	..	..	..	..	..
6	Aberdeen	..	..	..	..	..	..
7	Peterhead	..	..	..	..	..	..
8	Fraserburgh	..	..	..	..	..	..
9	Banff	..	8	..	8	..	8
10	Buckie	..	..	..	..	..	..
11	Findhorn	..	..	..	..	..	..
12	Cromarty	..	..	..	..	..	..
13	Helmsdale	..	4	4	8	..	4
14	Lybster	..	..	..	..	..	..
15	Wick	..	..	..	..	..	..
	East Coast Totals carried down	7	15	4	26	7	15
	Orkney and Shetland.						
16	Orkney	..	..	..	..	..	..
17	Shetland	..	..	..	..	..	..
	Orkney and Shetland Totals carried down	..	..	..	..	..	..
	WEST COAST.						
18	Stornoway	9	13	10	32	9	10
19	Barra	9	13	25	47	8	13
20	Loch Broom	..	4	3	7	..	4
21	Loch Carron and Skye	..	15	3	18	..	15
22	Fort-William	..	6	2	8	..	6
23	Campbeltown	1	15	4	20	1	15
24	Inveraray	..	29	3	32	..	29
25	Rothesay	..	5	1	6	..	5
26	Greenock	..	2	6	8	..	2
27	Ballantrae	..	17	13	30	..	17
	West Coast Totals carried down	19	119	70	208	18	116
	Fishery Cruiser "Brenda"	..	..	..	..	..	..
	" " "Freya"	..	..	..	..	..	..
	" " "Minna"	..	..	..	..	..	..
	" " "Norna"	..	..	..	..	..	..
	" " "Vigilant"	..	..	..	..	..	..
	H.M.S. "Ringdove"	..	..	..	..	..	..
	Cruisers' Totals carried down	..	..	..	..	..	..
	Totals brought down.						
	East Coast	7	15	4	26	7	15
	Orkney and Shetland	..	..	..	..	..	..
	West Coast	19	119	70	208	18	116
	Cruisers	..	..	..	..	..	..
	Grand Totals for 1913	26	134	74	234	25	131
	Grand Totals for 1912	32	139	68	239	32	139
	Increase in 1913	..	..	6	..	..	..
	Decrease in 1913	6	5	..	5	7	8

H.

Boat Proceedings in Scotland in the Year 1913, under Sea Fisheries Acts of 1868 and Amendment Act of 1885.

Issued.		Certificates Examined and Endorsed.				Boats Detained.						No.
Third Class.	Total.	First Class.	Second Class.	Third Class.	Total.	Steam Trawlers.	Other Steam Fishing Vessels.	First Class.	Second Class.	Third Class.	Total.	
..	..	..	..	..	..	..	..	..	..	..	..	1
..	..	4	44	..	48	12	..	..	..	..	12	2
..	10	90	63	9	162	..	..	..	..	..	..	3
..	..	..	..	..	..	..	..	..	..	..	..	4
..	..	..	..	..	..	..	..	..	..	..	..	5
..	..	..	..	..	..	130	4	..	..	..	134	6
..	..	22	16	17	55	..	..	..	..	..	..	7
..	..	277	111	174	562	..	2	..	..	..	2	8
..	8	72	63	36	171	..	..	..	..	..	..	9
..	..	215	23	25	263	..	..	..	..	..	..	10
..	..	..	..	..	..	..	..	..	..	..	..	11
..	..	..	5	29	34	..	..	..	..	..	..	12
4	8	23	36	41	100	..	..	..	..	..	..	13
..	..	..	..	..	..	..	..	..	..	..	..	14
..	..	42	24	44	110	..	..	..	..	..	..	15
4	26	745	385	375	1,505	142	6	..	..	..	148	
..	..	..	..	..	..	..	..	..	..	..	..	16
..	..	..	..	..	..	..	..	..	4	..	4	17
..	..	..	..	..	..	..	..	..	4	..	4	
9	28	72	319	141	532	..	..	..	..	..	..	18
25	46	37	134	118	289	..	..	..	..	..	..	19
3	7	4	143	172	319	..	..	..	..	..	..	20
3	18	19	174	217	410	..	..	..	..	..	..	21
2	8	5	127	78	210	..	..	..	..	..	..	22
4	20	1	211	41	253	..	..	..	..	..	..	23
3	32	..	140	73	213	..	..	..	..	..	..	24
1	6	2	37	48	87	..	..	..	..	..	..	25
6	8	..	50	58	108	..	..	..	..	..	..	26
13	30	..	224	125	349	..	..	..	..	..	..	27
69	203	140	1,559	1,071	2,770	..	..	..	..	..	..	..
..	..	..	..	..	..	154	19	21	6	..	200	
..	..	..	..	..	..	148	10	5	..	1	164	
..	..	..	..	..	..	3	59	81	13	..	156	
..	..	..	..	..	..	64	8	7	..	..	79	
..	..	..	..	..	..	..	..	1	51	..	52	
..	..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	369	96	115	70	1	651	
4	26	745	385	375	1,505	142	6	..	..	..	148	
..	..	..	..	..	..	..	..	..	4	..	4	
69	203	140	1,559	1,071	2,770	..	..	..	..	..	..	
..	..	..	..	..	..	369	96	115	70	1	651	
73	229	885	1,944	1,446	4,275	511	102	115	74	1	803	
68	239	1,025	2,037	1,426	4,488	498	59	313	77	1	948	
5	..	..	..	20	..	13	43	..	..	..	..	
..	10	140	93	..	213	..	..	198	3	..	145	

APPENDIX I.—No. I.

HARBOUR WORKS.—ACCOUNT of RECEIPTS and PAYMENTS by the Fishery Board for Scotland for Building, Extending, and Repairing PIERS or HARBOURS in Scotland in the year 1913.

Dr.

1913.		£	s.	d.
Jan. 1.	To Balance	27,544	11	10
	PARLIAMENTARY GRANT.			
Mar. 31.	To Grant in aid of Piers or Quays (5 Geo. IV. cap. 64)	3,000	0	0
	BANK INTEREST.			
Dec. ,,	To Interest on amount deposited in Bank	698	5	3
		£31,242	17	1

Cr.

1913.		£	s.	d.
Dec. 31.	By Payments for Harbour Works during the year, viz. :—			
	Whitehall, Stronsay	55	11	10
	Avoch	293	10	6
	Dunure	31	10	0
	Pennan	272	19	8
	Port Seton	180	0	0
,, ,,	Chief Surveyor to the Board of Agriculture for Scotland: honorarium for services in connection with applications for assistance for harbour works	100	0	0
,, ,,	Balance in hand	30,309	5	1
		£31,242	17	1

APPENDIX I.—No. II.

RETURN of the PIERS and HARBOURS Erected or Improved by the FISHERY BOARD for SCOTLAND from 1st January 1883 to 31st December 1913, showing for each undertaking the CONTRIBUTIONS made by the Board, the SUBSCRIPTIONS raised by the Localities (so far as coming within the cognisance of the Board), and the TOTAL EXPENDITURE :—

County.	Pier or Harbour.	Total Contribution by the Board.			Total Contribution by the Locality.			Total Expenditure to 31st December 1913.		
		£	s.	d.	£	s.	d.	£	s.	d.
Aberdeen .	*Rosehearty	3,881	10	11	500	0	0	4,381	10	11
	†Pennan .	1,272	19	8	776	2	11	2,049	2	7
	Collieston .	5,482	0	7	1,618	4	6	7,100	5	1
	Sandhaven	738	10	9	300	0	0	1,038	10	9
	Fraserburgh	5,000	0	0	..			5,000	0	0
Argyll .	Carsaig, Mull	5	17	0	..			5	17	0
	Waterfoot, Cantyre .	24	0	0	116	14	0	140	14	0
Ayr . .	Dunure .	493	16	8	539	0	0	1,032	16	8
	Ballantrae	105	0	0	109	14	4	214	14	4
Banff .	Crovie .	971	16	3	324	12	6	1,296	8	9
	*Findochty	9,331	8	9	7,500	0	0	16,831	8	9
	Buckpool .	1,474	18	11	800	0	0	2,274	18	11
	Buckie (Cluny) .	5,000	0	0	..			5,000	0	0
	Portknockie	6,993	16	0	3,500	0	0	10,493	16	0
	Whitehills .	7,315	11	3	3,200	0	0	10,515	11	3
	Sandend .	432	18	4	577	5	0	1,010	3	4
	Cullen .	1,400	0	0	600	0	0	2,000	0	0
	Macduff .	1,000	0	0	..			1,000	0	0
Berwick .	Coldingham	3,000	0	0	10,000	0	0	13,000	0	0
Fife . .	St. Monance	5,839	18	1	2,269	0	0	8,108	18	1
	Pittenweem	4,450	0	0	1,809	19	6	6,259	19	6
	St. Andrews	4,170	2	1	1,339	5	8	5,509	7	9
	Cellardyke	1,300	0	0	512	8	4	1,812	8	4
Forfar .	Auchmithie	4,125	0	0	1,125	0	0	5,250	0	0
Haddington	Port Seton	180	0	0	96	0	2	276	0	2
Inverness .	Broadford, Skye .	7,875	0	0	2,625	0	0	10,500	0	0
Kincardine	Stonehaven	2,900	0	0	..			2,900	0	0
Northumberland .	Greenshaven	319	16	1	600	0	0	919	16	1
	Craster .	1,000	0	0	3,000	0	0	4,000	0	0
Nairn .	Nairn .	5,587	10	0	1,862	10	0	7,450	0	0
Orkney and Shetland	Holm, Orkney .	1,102	0	10	413	0	0	1,515	0	10
	Whitehall, Stronsay	3,000	0	0	1,950	11	8	4,950	11	8
Ross and Cromarty	Balintore	5,805	13	0	1,935	4	5	7,740	17	5
	Rockfield .	10	0	0	5	0	0	15	0	0
	Ness, Lewis	8,072	6	7	3,000	0	0	11,072	6	7
	Cromarty .	300	0	0	137	13	9	437	13	9
	†Avoch .	1,693	10	6	1,708	13	10	3,402	4	4
Sutherland	Portnacon .	900	0	0	300	0	0	1,200	0	0
		112,555	2	3	55,055	0	5	167,610	2	8

* These harbours were begun by the old Board, but the whole of the payments made towards the works are now given.

† The grants to these harbours have not yet been wholly expended.

Grants have also been provisionally made to Buckie, Findochty, Whitehills, Banff, Macduff, St. Andrews, Maidens, and Port Charlotte, amounting in all to £11,669 10s.

APPENDIX I.—No. III.

BRAND FEES.—ACCOUNT OF THE BRAND FEE REVENUE, THE COST OF COLLECTION, THE SURPLUS, AND THE EXPENDITURE, during the period from 1881 to 1912–13.

Year of Collection.	Total Proceeds of Brand Fees.	Estimated Cost of Collection.*	Surplus or Deficit.	Year in which Surplus Voted.	Amount Voted.	How disposed of. For Telegraph Guarantees.	For Scientific Investigation.	For Eyemouth Harbour Loan Guarantee.	Transferred to General Harbour Fund.†
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
	£	£	£		£	£ s. d.	£ s. d.	£ s. d.	£ s. d.
10 Years 1881–90 ‡	83,245	56,647	26,598	1882–92	26,860	9,710 14 1	768 1 4	1,824 0 0§	1,4557 4 7
10 Years 1891–1900 ‖	65,760	49,650	16,110	1892–1902	18,398	3,238 12 3	..	2,895 6 11	12,264 0 10
1901	6,423	5,096	1,327	1902–03	1,327	..	..	460 4 6	866 15 6
1902	7,259	5,219	2,040	1903–04	2,040	..	..	453 14 6	1,586 5 6
1903	6,067	5,181	886	1904–05	886	..	..	447 4 6	438 15 6
1904	8,070	5,443	2,627	1905–06	2,627	..	..	440 14 6	2,186 5 6
1905	6,582	5,363	1,219	1906–07	1,219	..	..	437 9 6	781 10 6
1906	5,100	5,487	*387*	..	..	..	..	..	..
1907	8,928	5,277	3,651	1908–09	3,651	..	..	421 4 7	3,229 15 5
1908	7,218	5,419	1,799	1909–10	1,799	..	..	414 14 6	1,384 5 6
1909	3,857	5,376	*1,519*	..	..	..	..	..	..
1910	5,246	5,467	*221*	..	..	..	..	..	..
1911	4,455	5,549	*1,094*	..	..	..	..	..	..
1912	2,915	5,550	*2,635*	..	..	..	..	..	..
Total . .	221,125	170,724	50,401	..	58,807	12,949 6 4	768 1 4	7,794 13 6	37,294 18 10

* For details see Civil Service Estimates (Class II., Vote for Fishery Board for Scotland). † To be spent as required ‡ For details of these years, see 19th or previous Annual Reports.

§ This amount was set aside in the year 1891 as a Reserve Fund only to be drawn upon in the event of the Brand Fee Surplus in any particular year being insufficient, after defraying Telegraph Guarantees, to meet the liabilities under the Loan Guarantee. In 1892-93, £235 0s. 2d. was paid from this Fund; in 1898-99, £486 4s. 6d.; in 1900-01, £473 4s. 6d.; in 1901-02, £466 14s. 6d., and in 1906-07, the balance, amounting to £162 16s. 4d.

‖ For details of these years, see 26th Annual Report.

APPENDIX K.—No. I.

DAMAGE TO BOATS OR GEAR.—RETURN by Districts, of COMPLAINTS of damage to Fishing Vessels or their Gear by other Fishing Vessels, made to, and Investigated by, Officers of the FISHERY BOARD, in the Year 1913; and showing the Result in each case.

Date of alleged Offence.	Nature of Complaint.	Locality and Distance from Shore.	Whether Inside or Outside Territorial Waters.	Steps taken.	Result.
	ANSTRUTHER DISTRICT.				
1913 Feb. 5	Damage to nets of sail boat "Glad Tidings," A.H. 213, by motor boat "Elspeth Smith," K.Y. 38.	About one mile off Crail.	Inside.	Officer investigated case. Found respondent at fault, and assessed damage at £1 5s.	Defender paid damage as assessed.
,, 12	Damage to nets of sail boat "Annie," A.H. 118, by sail boat "Elizabeth Young," M.L. 146.	2 miles off Cellardyke.	Do.	Officer investigated case. Found both parties at fault.	Case dropped.
,, 19	Damage to nets of sail boat "Caller Ou," A.H. 216, by sail boat "Vigilant," K.Y. 599.	3 miles off Anstruther.	Do.	Officer investigated case. Found respondent at fault, and assessed damage at 10s.	Complainer accepted 8s. in settlement of claim.
	MONTROSE DISTRICT.				
Sept. 22	Loss and damage to lines of motor boats "Pioneer," M.E. 239, and "Lily Dale," M.E. 77, by steam trawler "Scottish Queen, A. 384.	6 miles N.W. of Tod Head.	Outside.	Officer investigated case and assessed loss at £3.	Insurance agent for trawler paid the claim as assessed by officer.
Nov. 12	Loss and damage to lines of motor boat "Olive Branch," M.E. 141, by steam trawler "Lionel," S.N. 109.	7 miles S.E. from Tod Head.	Do.	Officer investigated case and assessed loss at £3.	Insurance agent for trawler offered £1 10s. to settle the case, which complainers accepted.
,, 22	Loss and damage to lines of motor boat "Rosa," M.E. 245, by steam trawler "May Island," L.H. 105.	13 miles S.E. by S. from Scurdyness	Do.	Officer investigated case and assessed loss at £1 10s.	Case amicably settled by respondent paying complainers £1.

APPENDIX K.—No. I.—*continued.*

Date of alleged Offence.	Nature of Complaint.	Locality and Distance from Shore.	Whether Inside or Outside Territorial Waters.	Steps taken.	Result.
	ABERDEEN DISTRICT.				
March 1	Carrying away of 12 great lines of S.S. "Cortes," A. 290, by S.S. "Nubia," G.Y. 1275.	8 miles N.E. from Flugga, Shetland.	Outside.	Officer investigated case and assessed damage at £31 10s.	Complainer accepted £25 in full settlement of claim.
" 17	Carrying away of 5½ great lines of S.S. "Manorbier Castle," A. 439, by S.S. "Geria," G.Y. 496.	12 miles S.E. from Myggenaes, Faroe.	Do.	Officer investigated case and assessed damage at £15.	Case dropped.
April 2	Carrying away of 6 great lines of S.S. "Kincorth," A. 263, by S.S. "St. Lawrence," G.Y. 1137.	6 to 7 miles off Syderö, Faroe.	Do.	Officer investigated case and assessed damage at £16 16s.	Case dropped.
May 15	Carrying away of 7 great lines of S.S. "Curlew," A. 906, by S.S. "North Queen," A. 78.	20 miles S. by W. from Foula, Shetland.	Do.	Officer investigated case and assessed damage at £21.	Complainer accepted £18 in full settlement of claim.
July 21	Damaging of 16 nets of S.S. "Buckler," L.T. 756, by S.S. "Chancellor," P.D. 379.	65 miles E. from Aberdeen.	Do.	Officer investigated case and assessed damage at £27 5s.	Case dropped.
	PETERHEAD DISTRICT.				
May 23	Damage to nets of steam drifter "John S. Summers," P.D. 566, by steam trawler "Daniel Stroud," A. 438.	60 miles N.N.E by E. from Peterhead.	Do.	Officer investigated case and assessed damage at £12.	Case dropped.

		FRASERBURGH DISTRICT.				
June	24	Damage to nets of sail boat "Fame," F.R. 707, by steam trawler "Terrier," A. 34.	25 miles N.E. from Kinnaird Head.	Outside.	Officer investigated case. Damage estimated at £3.	Found respondent at fault, and after some correspondence, the full amount was paid to complainer through officer.
Aug.	8	Damage to nets of sail boat "Three Sisters," F.R. 907, by steam drifter "Leader," B.F. 1338.	28 miles N.E. from Kinnaird Head.	Do.	Officer investigated case. Damage estimated at £10.	Found respondent at fault. Respondent denied liability, and the case was apparently allowed to drop.
,,	29	Damage to nets of steam drifter "Cape Colony," F.R. 525, by steam drifter "Ladysmith," B.F. 1528.	13 miles E. by N. from Kinnaird Head.	Do.	Officer investigated case. Damage estimated at £16.	Found respondent at fault. Respondent denied liability and the case was apparently allowed to drop.
,,	29	Damage to nets of steam drifter "Crown Prince," F.R. 180, by steam drifter "Success," B.F. 1459.	14 miles E. by N. from Kinnaird Head.	Do	Officer investigated case, from complainer's evidence only. Damage estimated at £12.	Found respondent at fault. Respondent paid no attention to the communication sent him.
,,	29	Damage to nets of steam drifter "Pleiades," F.R. 489, by steam trawler "Salacon," G.Y. 55.	11 miles E. from Kinnaird Head.	Do.	Officer investigated case. Damage estimated at £35.	Found respondent at fault. Respondent denied liability, and case may go to court.
Sept.	1	Damage to nets of sail boat "Nellie Wood," F.R. 843, by steam drifter 'Prestige," B.C.K. 156.	17 miles S.W. from Fair Isle.	Do.	Officer investigated case. Damage estimated at £12.	Found respondent at fault. Case afterwards went into underwriters' hands.
		BUCKIE DISTRICT.				
Mar.	12	Carrying away of 5 cod nets and damage to bush-rope of "M. Slater," B.C.K. 57, by trawler "King Erik," E. 169.	Moray Firth, 20 miles N.N.E from Buckie.	Do.	Case reported to the Fishery Board. Estimated damage, £17 16s.	Legal proceedings necessary. No action taken.
,,	18	Carrying away of 4 cod nets of boat "Spider," B.F. 279, by steam trawler "Johanna Bertha," I.J.M. 144.	23 miles N.W. from Buckie.	Do.	Case reported to the Fishery Board. Damage estimated at £4.	No claim put forward by master of "Spider."

APPENDIX K.—No. I.—*continued.*

Date of alleged Offence.	Nature of Complaint.	Locality and Distance from Shore.	Whether Inside or Outside Territorial Waters.	Steps taken.	Result.
	BUCKIE DISTRICT—*continued.*				
Mar. 21	Carrying away of 17 nets, 2 coils of rope and anchor of boat "Fame" B.F. 86, by trawlers "Gerbrig," I.J.M. 101, and "Louise," V.L. 7.	7 miles E. by N. from Tarbat Ness	Outside.	Case reported to the Fishery Board. Damage estimated at £31.	Evidence in sufficient. Case dropped
April. 1	Carrying away of 9 nets, and damage to others, with loss of coil of bush rope, of boat "Catherine," B.F. 404, by trawler "Catherina," I.J.M. 90.	Moray Firth, 10 miles S. of Helmsdale.	Do.	Case reported to the Fishery Board. Estimated damage, £20.	Board made representation to owners, who denied liability. Case dropped.
	FINDHORN DISTRICT.				
Jan. 11	Damage to cod nets of sail boat "Union," I.N.S. 242, by foreign steam trawler unidentified.	6 miles W. by S. of Burghead.	Do.	Damage estimated at £12.	As identity of offending vessel was not established case was dismissed.
„ 14	Damage to small lines of sail boat "Choice," I.N.S 491, by steam trawler "Nestor," S.D. 12.	4 miles N. of Covesea Light.	Do.	Communicated with the Grimsby agent of the trawler. Damage estimated at £5.	Liability denied. Case dropped.
„ 22	Damage to small lines of sail boat "Violet," I.N.S. 490, by steam trawler "Norseman," S.D. 4.	6 miles N.N.W. of Burghead.	Do.	Communicated with the Grimsby agent of the trawler. Damage estimated at £3 6s.	Complainer ultimately accepted £1 10s. in full settlement.
„ 22	Damage to small lines of sail boat "Isabella," I.N.S. 498, by steam trawler "Norseman," S.D. 4.	Do.	Do.	Communicated with the Grimsby agent of the trawler. Damage estimated at £2 4s.	Complainer ultimately accepted £1 in full settlement.

Jan.	28	Damage to cod nets of sail boat "Cormacks," I.N.S. 34, by steam trawler "Nestor," S.D. 12.	20 miles N. by E. from Lossiemouth.	Outside.	Communicated with the Grimsby agent of the trawler. Damage estimated at £13.	Liability denied. Case dropped.
Feb.	8	Damage to cod nets of sail boat "Lady Agnes," I.N.S. 14, by steam trawler "Nautilus," O. 128.	6 miles E.S.E. from Tarbat Ness.	Do.	Communicated with owner of trawler. Damage estimated at £8.	Complainer ultimately accepted £4 in full settlement.
"	8	Damage to cod nets of sail boat "Josephine," I.N.S. 398, by foreign trawler unidentified.	3½ miles W.N.W. of Burghead.	Do.	Damage estimated at £21.	As identity of offending vessel was not established case was dismissed.
"	10	Damage to cod nets and warp of sail boat "Lady Ann," I.N.S. 1111, by steam trawler "Norseman," S.D. 4.	10 miles N. from Lossiemouth.	Do.	Damage estimated at £70. Communicated with the Grimsby agent of the trawler.	Liability denied. Case dropped.
Mar.	10	Damage to cod nets and warp of sail boat "Trotb, I.N.S. 216, by steam trawler "Creuvers," I.J.M. 140.	6 miles E. by S. from Tarbat Ness.	Do.	Communicated with owner of trawler. Damage estimated at £29.	Liability denied. Case dropped.
"	10	Damage to cod nets and warp of sail boat "Fame, I.N.S. 59, by foreign trawler unidentified.	4 miles W.N.W. of Burghead.	Do.	Damage estimated at £46.	As identity of offending vessel was not established, case was dismissed.
"	15	Damage to cod nets and warp of steam drifter "Ferndale," I.N.S. 171 by steam trawler "Niobe," S.D. 5.	10 miles W.N.W. of Lossiemouth.	Do.	Communicated with owner of trawler. Damage estimated at £12 10s.	Liability denied. Case dropped.
"	17	Damage to cod nets of steam drifter "Carol and Dorothy," I.N.S. 120, by steam trawler "Dolfijn," I.J.M. 112.	7 miles E. by N. from Tarbat Ness.	Do.	Communicated with owner of trawler. Damage estimated at £7 10s.	Do.
"	17	Damage to cod nets of steam drifter "Glen Corran," I.N.S. 580, by steam trawler "Dolfijn," I.J.M. 112.	7 miles E. by N. from Tarbat Ness	Do.	Comunicated with owner of trawler. Damage estimated at £6.	Do.
"	17	Damage to cod nets of sail boat "Sublime," I.N.S. 246, by steam trawler "Norseman," S.D. 4.	4 miles E.N.E. of Tarbat Ness.	Do.	Communicated with the Grimsby agent of the trawler. Damage estimated at £11 5s.	Do.
"	17	Damage to cod nets of sail boat "Lady Ann," I.N.S. 1111, by steam trawler "Norseman," S.D. 4.	4 miles E.N.E. of Tarbat Ness.	Do.	Communicated with the Grimsby agent of the trawler. Damage estimated at £2 10s.	Do.

APPENDIX K.—No. I.—*continued.*

Date of alleged Offence.	Nature of Complaint.	Locality and Distance from Shore.	Whether Inside or Outside Territorial Waters.	Steps taken.	Result.
	FINDHORN DISTRICT—*continued.*				
Mar. 21	Damage to cod nets and warp of steam drifter "Ferndale," I.N.S. 171, by steam trawler "Emmanuel," O. 87.	10 miles N. by W. from Lossiemouth.	Outside.	Communicated with owner of trawler. Damage estimated at £10.	Liability denied. Case dropped.
,, 21	Damage to cod nets of steam drifter "Aivern," I.N.S. 325, by steam trawler "Emmanuel," O. 87.	10 miles N. by W. from Lossiemouth.	Do.	Communicated with owner of trawler. Damage estimated at £12.	Do.
,, 26	Damage to cod nets of sail boat "Sublime," I.N.S. 246, by steam trawler "Johanna Elizabeth," I.J.M. 99.	5 miles E. of Tarbat Ness.	Do.	Communicated with owner of trawler. Damage estimated at £11 5s.	Complainer accepted £5 in full settlement.
,, 26	Damage to cod nets of sail boat "Sublime," I.N.S. 246 by steam trawler "Louise," V.L. 7.	5 miles E. of Tarbat Ness	Do.	Communicated with owner of trawler. Damage estimated at £7 10s.	Liability denied. Case dropped.
,, 26	Damage to cod nets of sail boat "General Macdonald," I.N.S. 329, by steam trawler "Louise," V.L. 7.	5 miles E. of Tarbat Ness.	Do.	Communicated with owner of trawler. Damage estimated at £6 5s.	Do.
,, 31	Damage to cod nets and warp of sail boat "Catherine Murray," I.N.S. 1723, by foreign trawler unidentified.	18 miles N.N.W. of Lossiemouth.	Do.	Reported to Fishery Board. Damage estimated at £13.	Complainers were at fault in leaving nets unattended.
,, 31	Damage to cod nets of steam drifter "Uberous," I.N.S. 405, by steam trawler unidentified.	16 miles N. by E. from Lossiemouth.	Do.	Reported to Fishery Board. Damage estimated at £17.	Do.

April	14	Damage to cod nets and warp of sail boat "Ben Attow," I.N.S. 2522, by foreign trawler unidentified.	16 miles N. by E. from Lossiemouth.	Outside.	Reported to Fishery Board. Damage estimated at £36.	Do.
"	14	Damage to cod nets and warp of sail boat "General Macdonald." I.N.S. 329, by foreign trawler unidentified.	15 miles N. by E. from Lossiemouth.	Do.	Reported to Fishery Board. Damage estimated at £34.	Do.
"	14	Damage to cod nets and warp of sail boat "Lady Ann," I.N.S. 1111, by foreign trawler unidentified.	4 miles E. by N. from Tarbat Ness.	Do.	Reported to Fishery Board. Damage estimated at £16.	Do.
"	14	Damage to cod nets and warp of sail boat "Mary Slater," I.N.S. 1217, by foreign trawler unidentified.	3½ miles E. by N. from Tarbat Ness.	Do.	Reported to Fishery Board. Damage estimated at £25.	Do.
"	14	Damage to cod nets and warp of sail boat "Pansy, I.N.S. 1365, by foreign trawler unidentified.	5 miles E. by N. from Tarbat Ness.	Do.	Reported to Fishery Board. Damage estimated at £20.	Complainers were at fault in leaving nets unattended.
"	14	Damage to cod nets and warp of sail boat "Ben Ledi," I.N.S. 532, by foreign trawler unidentified.	9 miles N. by W. from Lossiemouth.	Do.	Reported to Fishery Board. Damage estimated at £51.	Do.
"	14	Damage to cod nets and warp of sail boat "Troth, I.N.S. 216, by foreign trawler unidentified.	4 miles E. by N. from Tarbat Ness.	Do.	Reported to Fishery Board. Damage estimated at £18.	Do.
"	28	Carrying away of cod nets and warp of sail boat "Glen Lossie," I.N.S. 2419, by steam trawler "Alpha," G.G. 443.	11 miles N. by W. from Lossiemouth.	Do.	Reported to Fishery Board. Damage estimated at £30.	Evidence against offender insufficient. Case dropped.
Nov.	10	Damage to small lines of sail boat "O.A.P." I.N.S. 281, by foreign trawler unidentified.	4 miles N.E. from Lossiemouth.	Do.	Reported to Fishery Board. Damage estimated at £3.	Do.

APPENDIX K.—No. I.—*continued.*

Date of alleged Offence.	Nature of Complaint.	Locality and Distance from Shore.	Whether Inside or Outside Territorial Waters.	Steps taken.	Results.
	FINDHORN DISTRICT—*continued.*				
Dec. 23	Damage to small lines of sail boat "Guide Me," I.N.S. 330, by steam trawler "Nestor," S.D. 12.	4 miles N. of Burghead.	Outside.	Reported to Fishery Board. Damage estimated at £2.	Legal proceedings necessary for recovery. No action taken.
	WICK DISTRICT.				
Jan. 6	Carrying away of two nets, and damaging of bush rope of steam drifter "Gowanbrae," I.N.S. 181, by steam trawler "Uvelaria," G.Y. 1190.	2 to 3 miles off Isle Roan.	Doubtful.	Communicated with owners of offending vessel.	Liability was admitted, and claim of £15 8s. was paid in full.
	SHETLAND DISTRICT.				
June 21	Damage to nets of motor boat "Welcome," I.N.S. 234, by steam drifter "Qui Sait," L.T. 303.	28 miles S. by W. from Lerwick.	Outside.	Officer examined both skippers.	Found respondent at fault. He offered £1 10s. in settlement, which was accepted by complainer.
Sept. 8	Alleged damage to nets of sail boat "George," L.K. 1098, by steam drifter "Gracie," B.F. 973.	25 miles off Lerwick.	Do.	Do.	Found respondent was not to blame.

APPENDIX K.—No. II.

ILLEGAL TRAWLING.—Return of Prosecutions undertaken against the Masters of British and Foreign Trawl Vessels in 1913, showing the Result in each case.

Date of Alleged Offence.	Name, &c., of Person Charged.	Name, Letters, and Number of Vessel.	Where alleged Offence Committed.	Statute or Bye-law Contravened.	Place and Date of Trial.	Result of Trial.	By whom Detected.
			(1) *BRITISH*	*VESSELS.*			
1913. Jan. 9	Donald M'Bain Craig, Master.	"Braconglen," A. 485.	Off Cowhythe Head, Portsoy, Banffshire (inside territorial waters).	Herring Fishery (Scotland) Act, 1889, Sec. 6.	Aberdeen, January 27th.	Fined £40 or 30 days' imprisonment Fine paid.	Fishery Cruiser "Freya."
1912. Dec. 22	Frank Fraser, Master.	"Active," P.D. 361.	Off Spear Head, Caithness (inside territorial waters).	Do.	Wick, January 27th, 1913.	Fined £60 or 40 days' imprisonment, and port gear confiscated. Went to prison.	Fishery Cruiser "Norna."
Dec. 22	Alfred Kettle, Master.	"Harry Ross," A. 453.	Do.	Do.	Do.	Fined £60 or 40 days, and port gear confiscated. Went to prison.	Do.
Dec. 22	George Bee, Master.	"Ameer," G.Y. 397.	Moray Firth (outside territorial waters).	Fishery Board Bye-laws 10 & 14.	Wick, February 10th, 1913.	Fined £25 or 30 days, and starboard gear confiscated. Went to prison.	Fishery Cruiser "Freya."
Dec. 22	Harry Andrews, Master.	"Thistle," G.W. 2.	Do.	Do.	Do.	Fined £40 or 40 days, and port gear confiscated. Fine paid.	Do.
Dec. 23	William Jarvie, Master.	"Annie Walker," L.H. 195.	About 1 mile from May Island.	Herring Fishery (Scotland) Act, 1889, Sec. 6.	Cupar, Feb. 10, 1913.	Fined £80 or 60 days' imprisonment. Accused went to prison.	Pittenweem fishermen.
1913. Mar. 14	William Wood, Master.	"Fifeness," A. 377.	Moray Firth (outside territorial waters).	Fishery Board Byelaws 10 & 14.	Wick, April 4th.	Fined £40 or 40 days, and port gear confiscated. Fine paid.	Fishery Cruiser "Freya."

APPENDIX K.—No. II.—*continued.*

Date of Alleged Offence.	Name, &c., of Person Charged.	Name, Letters, and Number of Vessel.	Where Alleged Offence Committed.	Statute or Bye-law Contravened.	Place and Date of Trial.	Result of Trial.	By whom Detected.
1913. Mar. 14	Robert Wood, Master.	"Largo Bay," A. 372.	Moray Firth (outside territorial waters).	Fishery Board Byelaws 10 & 14.	Wick, April 4th.	Fined £40 or 40 days, and starboard gear confiscated. Fine paid.	Fishery Cruiser "Freya."
Feb. 9	William Reay, Master.	"Recorder," S.N. 293.	2 miles S.E. from Balta Island.	Herring Fishery (Scotland) Act, 1889, Sec. 6.	Lerwick, May 6th.	Fined £75 or 40 days' imprisonment. Fine paid.	Fishery Cruiser "Norna."
May 21	John Cormack, Master.	"Ben Lui," A. 185.	$1\frac{5}{6}$ miles off Balta Isle.	Do.	Lerwick, May 22nd.	Fined £50 or 30 days' imprisonment. Fine paid.	Do.
June 29	Samuel J. Bensley, Master.	"John H. Irvin," A. 297.	1 mile N.W. from Faither, Northmavine.	Do.	Lerwick, July 2nd.	Fined £75 or 40 days. Went to prison.	Do.
June 29	Alexander M'Leod, Master.	"Leven," A. 447.	$\frac{2}{3}$ of a mile N.W. from Faither, Northmavine.	Do.	Do.	Fined £75 or 40 days. Went to prison.	Do.
June 29	Frederick Wonnacott, Master.	"Bee Orchis," B.M. 155.	Luce Bay, 2 miles E. of Chapelrossan.	Do.	Stranraer, 17th July.	Fined £25 or 60 days' imprisonment. Fine paid.	James Blackwell fisherman, Chapelrossan.
July 23	Bertie Alfred Martin, Master.	"Osprey II.," F.D. 129.	About 4 miles from Ailsa Craig.	Do.	Campbeltown, July 23rd.	Fined £40 or 60 days' imprisonment. Fine paid.	Fishery Cruiser "Vigilant."
June 29	Robert Gove, Master.	"Crathie," A. 350.	$1\frac{1}{6}$ miles N. $\frac{1}{2}$ E. from Faither, Northmavine.	Do.	Lerwick, August 21st.	Fined £75 or 40 days' imprisonment. Fine paid.	Fishery Cruiser "Norna."
July 7&8	George Seivwright, Master.	"Leven," A. 447.	$\frac{1}{2}$ mile S.E. from Noness Head, Northmavine.	Do.	Do.	Fined £75 or 40 days' imprisonment. Went to prison.	Northmavine fishermen.
Aug. 24	Henry Edward Beavers, Master.	"Leven," A. 447.	Broadbay, Parish of Stornoway.	Do.	Stornoway, Sept. 26th.	Fined £50 or 30 days' imprisonment. Fine paid.	Lighthousekeepers at Tiumpanhead: Coastguard there: and Fishery Cruiser "Minna."

June 5	William Sykes, Master.	"Strathfillan," A. 63.	1 mile W. by N. ½ N. from Black Head, Walls.	Herring Fishery (Scotland) Act, 1889, Sec. 6.	Lerwick, September 29th.	Fined £75 or 40 days' imprisonment. Went to prison.	Shetland fishermen.
Oct. 14	Alexander Downie, Master.	"Excel," A. 288.	Off Collieston, Aberdeenshire.	Do.	Aberdeen, October 16th.	Fined £75 or 60 days' imprisonment. Fine paid.	Fishery Cruiser "Brenda."
Aug. 4	Henry Edward Beavers, Master.	"Leven," A. 447.	1 mile off Sandray.	Do.	Lochmaddy, Nov. 13th.	Fined £10 or 14 days' imprisonment. Fine paid.	Local fishermen.
July 4	Frederick Powdrell, Master.	"Champion," A. 367.	1½ miles off Sandray.	Do.	Do.	Convicted in absence, and fined £100 or 60 days' imprisonment.	Do.
Dec. 11	Lewis Whyte, Master.	"Rose," G.W. 26.	1¾ miles from South Gavel, Fair Isle.	Do.	Lerwick, Dec. 12th.	Fined £75 or 40 days' imprisonment. Fine paid.	Fishery Cruiser "Norna."
Dec. 14	Edward Jones, Master.	"Doris," F.D. 141.	Off Bayble Head, Lewis.	Do.	Stornoway, December 15th.	Fined £50, or 60 days' imprisonment. Fine paid.	Fishery Cruiser "Minna."
			(2) *FOREIGN*	*VESSELS.*			
1912. Nov. 25	Christian Christiansen.	"Apollo," S.D. 7.	2⅞ miles off Boar's Head Rock, Parish of Urquhart, Elginshire (inside territorial waters).	Sea Fisheries Act, 1883, Sec. 7, Sub-Sec. 2 (b).	Elgin Sheriff Court, January 24th, 1913.	Fined £5 or 14 days' imprisonment, and gear and fish on board forfeited. Fine paid.	Coast Guard, Lossiemouth. Arrested by H.M.S. "Ringdove."
1913. Feb. 12	Thorarinn Bjarnarson, Master.	"King Erik," E. 169.	Off Helman Head Caithness-shire (inside territorial waters).	Sea Fisheries Act, 1883, Sec. 7, Sub-Sec. 2(b), and Sea Fisheries Act, 1891, Sec. 5.	Aberdeen, February 27th,	Fined £10 and fish and gear forfeited. Fine paid.	Fishery Cruiser "Freya."
Feb. 12	Anund Aagetvedt, Master.	"Nestor," S.D. 12.	Off Helman Head, Caithness-shire (inside territorial waters).	Sea Fisheries Act, 1883, Sec. 7, Sub-Sec. 2(b), and Sea Fisheries Act, 1891, Sec. 5.	Do.	Do.	Do.

APPENDIX K.—No. II.—*continued.*

Date of Alleged Offence.	Name, &c., of Person Charged.	Name, Letters, and Number of Vessel.	Where Alleged Offence Committed.	Statute or Bye-law Contravened.	Place and Date of Trial.	Result of Trial.	By whom Detected.
1913. April 12	Albert Bandeck, Master.	"Hornsriff," P.G. 72.	Off Staxigoe, Caithness-shire (inside territorial waters).	Sea Fisheries Act, 1883, Sec. 7, Sub-Sec. 2 (b), and Sea Fisheries Act, 1891, Sec. 5.	Aberdeen, April 15th.	Fined £10 or 20 days' imprisonment. Fine paid. Fish and gear forfeited.	Fishery Cruiser "Freya."
April 22	Christian Kromke.	"Norseman," S.D. 4.	Within 3 mile limit, off South Head, Wick Bay.	Herring Fishery (Scotland) Act, 1889.	Wick, May 9th.	Do.	Fishery Officer and Coastguard at Wick.
Oct. 1	Christian Kromke.	"Norseman," S.D. 4.	Off Burghead Bay (inside territorial waters).	Sea Fisheries Act, 1883, Sec. 7 (2) (b).	Elgin Sheriff Court, November 19th.	Not proven.	H.M.S. "Ringdove."

APPENDIX K.—No. III.

OFFENCES OTHER THAN ILLEGAL TRAWLING.—RETURN for 1913 of PROSECUTIONS undertaken for alleged Infringement of (*a*) Regulations for the Registering, Lettering, and Numbering of Sea Fishing Boats: (*b*) the Regulations for the Prevention of Collisions at Sea; (*c*) the Herring Fishery (Scotland) Act, 1889, sec. 5, fixing a weekly close time for Herring Fishing on the West Coast of Scotland; and (*d*) any other offence (other than illegal trawling).

Date of Alleged Offence.	Name, and Designation of Party Charged.	Name, Letters, and Number of Vessel.	Where Alleged Offence Committed.	Nature of Offence.	Place and Date of Trial.	Result of Trial.	By whom Detected.
1912 Dec. 21, ,, 22, ,, 23	Thomas Murdoch.	"William and Jane" of Stranraer.	Loch Ryan.	Breach of Weekly Close Time. Herring Fishery (Scotland) Act, 1889, sec. 5.	Stranraer, January 23rd 1913.	Fined 5s. or 5 days' imprisonment. Fine paid.	Fishery Cruiser "Vigilant."
1913 Apr. 22	Christian Kromke.	"Norseman," S.D. 4.	Wick Bay.	Obstruction of Sea Fishery Officer, sec. 14 (2) of Sea Fisheries Act, 1883.	Wick, May 9th.	Sheriff dismissed charge as irrelevant.	Fishery Cruiser "Freya."
Aug. 24	Henry Edward Beavers, Master.	Steam trawler, "Leven," A. 447.	Within the scheduled area of Broadbay.	Concealing Letters and Number.	Stornoway, Sept. 26th.	Not proven	Lighthouse Keeper and Coastguard at Tiumpanhead, and Commander and Officers of Fishery Cruiser "Minna."
Oct. 14	Alexander Downie.	Steam trawler, "Excel," A. 288.	Off Collieston, Aberdeenshire.	Contravention of Articles 2 (*b*) and 9 (*d*) (1) of Regulations for Preventing Collisions at Sea, made by Orders in Council, dated 27th Nov. 1896 and 4th April 1906.	Aberdeen, October 16th.	Fined £25 or 60 days' imprisonment. Fine paid.	Fishery Cruiser "Brenda."

APPENDIX K.—No. IV.

ILLEGAL TRAWLING.—Summary of Prosecutions undertaken during the period 1886–1913 inclusive, showing number of Convictions obtained, Amount of Fines Imposed, &c., &c.

Years.	Number of Prosecutions undertaken.	Number of Convictions obtained.	Number of Verdicts of "Not Guilty."	Number of Verdicts of "Not Proven."	Amount of Fines imposed.	Amount of Fines paid.	Number of Masters who chose the alternative of imprisonment.	Number of Detections made by means of Board's cruisers.	Number of Detections made by means of Admiralty vessels.	Number of Detections made by Fishermen or other persons.
					£ s. d.	£ s. d.				
1886	7	6	1	..	26 0 0	26 0 0	..	..	..	..
1887	11	10	1	..	26 5 0	26 5 0	..	..	..	..
1888	3	3	..	..	35 0 0	25 0 0	1	..	..	..
*1889	20	16	..	4	117 0 0	107 0 0	1	..	..	..
1890	36	32	1	3	254 0 0	239 0 0	1	..	..	..
1891	23	18	3	2	490 0 0	410 0 0	2	..	..	..
1892	12	9	..	3	215 0 0	210 0 0	1	..	..	..
1893	11	11	..	..	370 0 0	270 0 0	1	..	..	..
1894	7	5	..	2	250 0 0	5 0 0	4	..	..	..
1895	30	24	4	2	467 0 0	410 0 0	2	..	..	..
†1896	23	20	..	3	950 0 0	445 0 0	7	3	8	12
1897	20	15	..	5	737 0 0	417 0 0	5	..	11	9
‡1898	5	4	..	1	102 0 0	17 0 0	2	..	2	3
1899	17	17	..	..	665 0 0	555 0 0	3	8	1	8
1900	31	30	..	1	1,705 0 0	1,167 0 0	10	22	2	7
§1901	26	24	..	2	1,045 0 0	550 0 0	10	17	3	6
1902	21	18	..	3	927 0 0	502 0 0	7	9	2	10
1903	27	25	2	..	1,355 0 0	1,011 0 0	6	16	3	8
1904	33	30	1	2	1,960 0 0	548 15 0	21	23	..	10
1905	38	34	2	2	2,645 0 0	1,475 13 4	13	27	3	8
1906	38	35	..	3	2,280 0 0	1,376 13 4	13	33	..	5
1907	131	122	6	2	4,495 0 0	1,387 19 8	42	74	31	26
1908	30	29	1	..	2,136 0 0	439 2 6	20	11	3	16
1909	63	61	..	2	4,738 0 0	1,026 6 8	29	34	3	26
1910	31	30	..	1	2,005 0 0	543 16 8	18	26	1	4
1911	53	49	..	1	3,355 0 0	1,176 13 4	30	24	11	18
1912	36	30	..	5	1,530 0 0	597 6 8	13	20	2	14
1913	29	27	..	2	1,345 0 0	720 0 0	9	21	1	7
	812	734	22	51	36,225 5 0	15,684 12 2	271	368	87	197

* In 1889 an Act was passed making trawling illegal in territorial waters around the coast of Scotland, except in certain areas; previous to that year, prosecutions for trawling could only be undertaken for contraventions of the Board's Bye-laws.

† Previous to 1896 no record was kept of "Means of Detection."

‡ In summer of 1898 the Board acquired two new cruisers; previous to that they only possessed one.

§ The Board acquired a fourth new cruiser in December 1900, and a fifth in September 1904, but in October 1904 they disposed of one of the cruisers built in 1898 as being too small to be practically useful. An additional cruiser was commissioned in May 1909.

APPENDIX L.

REPORTS BY THE INSPECTORS OF SEA FISHERIES AND DISTRICT FISHERY OFFICERS.

I. Inspectors of Sea Fisheries.

General Inspector of Sea Fisheries.

The results of the various fisheries for the year under review were the most remunerative on record, although as regards quantity they fell considerably short of 1912. In the returns of herrings there is a shortage of 751,977 cwts., but an increase of £177,221 in value. White fish also show an increase in value, concurrently with a decrease in the catch. The high prices realised for herrings and white fish—which have exceeded all previous records—were largely due (1) to the short supplies; (2) to the prosperity of the country and the improved position of the working classes; and (3) to the good demand for both fresh and cured fish abroad.

The number of boats employed in the fisheries was 8991, a decrease of 299 as compared with 1912. To this decrease the East Coast contributed 74, Orkney and Shetland 17, and the West Coast 208. Of steam fishing vessels (exclusive of trawlers) there are 884, valued at £2,051,980, nearly all of which were employed at herring fishing. For the first time since the inauguration of the steam drifter the West Coast contributed 3 vessels to the fleet. Of resident fishermen there is a decrease of 457, due chiefly to the decline of the inshore fisheries and to emigration.

The most notable feature in connection with the means of capture was the large increase in the value of boats and fishing gear, amounting to over a quarter of a million sterling. Altogether 43 steam drifters were built at a cost of £118,430, in addition to which a number of second-hand steam vessels were purchased on the English coast and added to the fleet.

The total number of boats fitted with motor auxiliary power is 523, valued at £147,436. It was in 1904 that the Board undertook the experiment of equipping a first-class sailing boat with motor power. Up to 1908 progress was somewhat slow, but since then it has been most satisfactory. The additions made to the fleet in 1913 were: East Coast, 120; Orkney and Shetland, 8; and West Coast, 39. Altogether 167 boats were fitted with motor power, the number on the East Coast having been exactly doubled as compared with 1912. East Coast fishermen were slow to adopt the system, but the success of many of the boats employed was such that they could not but be convinced of its utility. Another reason, and probably the most cogent, is the interest taken in mechanical power by the younger generation.

Of the various fisheries prosecuted on the Scottish coasts the herring fishing is the most important. Apart from the allied trades connected with the industry there were about 72,000 persons directly engaged in the catching, curing, and exporting of the fish to market. The total catch for the whole of Scotland, including Northumberland, was 4,449,323 cwts., valued at £2,087,754, as compared with 5,201,300 cwts. and £1,910,533 in value in 1912. The catch may be allotted as follows: East Coast,

2,377,022 cwts.; Orkney and Shetland, 1,027,693 cwts.; and West Coast, 1,044,606 cwts. Operations were conducted from practically every fishing port on the coast with varied success. Notwithstanding that there has been a marked increase in the catching power, the landings on the East Coast and Orkney and Shetland showed considerable decreases. On the other hand, in the catch of herrings on the West Coast, there is an increase of 46 per cent. in quantity and in value of 52 per cent. as compared with the previous year.

Otter trawling, in which 6 fewer vessels—2 steamers and 4 sailers—were employed than in 1912, is the most important branch of the white fishing industry, and during the year under review was very successful also, as there was an increase in the quantity landed of 156,256 cwts., and in the value of £196,048 as compared with the previous year. During the year a large portion of the catch was landed by German vessels fishing in Icelandic waters. The number of arrivals of foreign trawlers at Aberdeen has increased from 135 in 1906 to 572 in 1913, and their catches from 135,114 cwts. to 530,178 cwts. respectively. Previous to 1913 from 20 to 30 vessels invariably suspended operations during the months of July and August on account of low prices and poor demand, but on no occasion during the year under review were the markets for fresh fish in a depressed condition. The average price of trawl fish was 11s. 2d. per cwt. as compared with 10s. 4d. in 1912, and 9s. 2d. in 1911.

Neither great line nor small line fishing was carried on with any measure of success, and the quantity taken by these methods shows a decrease of 174,524 cwts. as compared with the previous year. On both the offshore and inshore grounds white fish of all descriptions were extremely scarce, and from all parts of the coast came the same reports as to the paucity of the catches. The most marked shortage was in haddock. Were it not for the fillip given to line fishing at several creeks on the coast by the introduction of motor power, the landings would have shown a very much larger decrease. The average price of line-caught fish was 10s. 10d. per cwt., being an advance of 1s. 5d. per cwt. as compared with 1912. Line haddocks show an advance of 2s. 10d. per cwt., while the less valuable varieties have all risen in price.

The year 1913 was remarkable for the early commencement of the great summer herring fishing. By the beginning of May a small fleet was working from Lerwick, and towards the middle of the month between 300 and 400 boats were employed. A promising start was made and some 40,000 crans were landed. Steadily the fleet increased, and by the beginning of June between 700 and 800 boats were fishing in Shetland waters. Notwithstanding favourable weather conditions the fishing unfortunately then fell away, with the result that by the end of July the stranger vessels had taken their departure. The landings during the three months the fishing lasted showed a decrease of 697,630 cwts., and £197,188 in value, as compared with the previous year.

The collapse of the fishing at Lerwick came as a great surprise not only to the curers and fishworkers, but to the traders who—reckoning on the success of previous years—had made extensive preparations for catering for some thousands of strangers.

The preparations for the new season which it was hoped would prove not only a record one but a remunerative one for all were on the most extensive scale; consequently curers lost heavily through having laid in large supplies of barrels and salt which they were obliged to transport elsewhere. The loss to the native workers was also a very serious one.

It is, however, gratifying to state that the local fleet employed at the herring fishing fared better than for the past 14 years. This was mainly due to the meagre catches, whereby prices were forced up to a figure

which was highly remunerative. Exclusive of Lerwick, the three centres of fishing in the Island are Whalsey, Sandwick, and Burra Isle, and the earnings of the fleets at these stations amounted to an average of about £500 per boat, the highest being close on £1300—remarkable earnings for a sail-boat. Curers and fishermen who operated from Baltasound had every reason to be satisfied, sail-boats having grossed up to £400 for the short period the fishing lasted.

In the landings of herrings in Orkney district there is a shortage of 222,723 cwts. in quantity, and £35,912 in value as compared with the previous year. Although fishing operations are carried on at several of the islands in the district, Stronsay continues to be the chief centre of the industry. Somewhat better results were obtained at Stromness than has been the case for several years back, and it is anticipated that an effort will be made to reopen the station next season.

To the curers the season was a very perplexing one, particularly to those who laid in enormous stocks of barrels and salt, a large proportion of which at the close of the fishing had to be removed at considerable expense to Northumberland and other fishing districts. To the majority of the fishermen working from the Island, however, the season's fishing was most remunerative. A number of the steamers grossed from £1400 to £1800, while the average was about £1200. Sail-boats also participated in the success.

During the period the fishing was in progress at Lerwick, the boats operating from the ports on the East Coast (except at Peterhead) were landing meagre catches, and prices consequently rose steadily until famine figures were reached. Towards the middle of July better catches were obtained, which had the effect of making the season for the fishermen one of the most successful on record. Owing to the high prices obtained for the green fish the season may well be described as a "fisherman's year." Not only did the steam drifters make big earnings, but the sail and motor boats also benefited proportionately. Another section of the trade which benefited in consequence of the high prices and big earnings was the fish salesmen, who were paid on commission.

From the curers' point of view the season was anything but a satisfactory one. So keen was the competition from the commencement of the fishing that on several occasions the prices paid were such as the cured market did not warrant. Fortunately there was a good demand and ready sales were effected, although not at a figure which left any margin of profit. However, many of the curers were able subsequently to recoup their losses owing to the successful fishing in East Anglia, where new records were created, and where it is reported curers made fabulous sums. In spite of the enormous fishings which were landed almost daily the price of cured herrings never receded to an unprofitable figure.

The quality of the herrings, particularly those caught from the middle of July onwards, was above the average. The proportion of well-developed fish was larger than for several seasons back, and even those caught during the earlier period of the season showed considerable improvement on recent years.

Curing was carried on under favourable weather conditions, which, along with the protection now given to the early cure, went a long way to enhance the reputation of the goods on the Continental markets.

The total catch of herrings on the Berwick and Northumberland coasts was 227,872 crans, against 30,392 in 1912, which were the highest landings since 1910. The average price was 28s. 4d. per cran, being 3s. 5d. in advance of the price of 1912. The fishing was invariably prosecuted on grounds 50 to 70 miles offshore. At this distance the sail-boats could only reckon on 3 shots per week, while the steamers and motor boats made almost daily

landings. The gross earnings of the steamers may be quoted at from £800 to £1200; of motor boats, £500 to £1100; and of sail boats, £300 to £500.

Owing to the scarcity of herrings—particularly in the Shetland waters—large fleets congregated at Blyth and North Shields, and a general commencement was made at these stations somewhat earlier than usual. Curing for the Continent was carried on with greater energy on this part of the coast than has hitherto been the case. At North Shields upwards of 45,000 barrels were cured and exported as against 1700 in 1912. Previous to this season there was a scarcity of station ground, but the authorities have become alive to the importance of the industry, with the result that considerable improvements and reclamations have been carried out in the vicinity of North Shields Harbour for the convenience of the trade.

The landings of herrings at Anstruther, Montrose, and Stonehaven fell considerably short of 1912. Notwithstanding the large fleet of steamers now belonging to Anstruther, the deliveries were chiefly by boats returning for the week ends to replenish their stores. Much depends on the proximity of the fishing grounds as to any increase or decrease in the landings at this station. The harbour being a tidal one, there is no inducement to visit the port, as considerable time is lost before the catches can be delivered.

At Montrose the fishing was the most unsuccessful in the annals of the district. The weather conditions were unsuitable for successful fishing, while the shoals did not appear to have visited their usual haunts. Fishermen and shore-workers were severely hit in consequence of the failure of the fishing. In the season's average price there is an increase of 8s. 2d. per cran, as compared with the previous year. The fleet employed at Stonehaven consisted of about a dozen sail-boats, and the chief cause of the failure was the distance from the fishing grounds.

Compared with the season of 1912 the landings at Aberdeen show an increase of upwards of 12,000 crans. There is also a substantial increase of £55,000 in value. It was not until the fishing broke up in Shetland that the landings at this station increased. Owing to the great offing at which the fleet operated, a number of the craft were unable to make daily landings. By the beginning of July the English drifters began to operate from the port, so that with an increased fleet the shortage in the catch was soon overtaken. The average price obtained throughout the season was 35s. 6d. per cran, as against 23s. 6d. last year. Despite the remunerative prices, steam drifter fishermen did not benefit to the extent that might have been anticipated. The working expenses had risen considerably, and the long drawn-out season, which extended over a period of from 15 to 16 weeks, as compared with 9 to 10 weeks in former years, made great inroads into the gross earnings. The fish salesmen, on the other hand, had one of the most lucrative seasons on record, as a number of the steamers grossed on an average from £800 to £2000. The sail-boats also did remarkably well. The season was not a successful one to the curer, as prices were rushed beyond their market value. Week after week curers were in hopes that with better landings on the East Coast prices would fall, but the unexpected happened. The price paid (per cran) for the green fish was often more than that obtained for the best selections (per barrel) when cured. To a large extent the trade relied on the percentage of barrels in excess of crans to meet expenses of cure, which at Aberdeen were estimated to be about 9s. per barrel, and which left little or no margin of profit.

The season at Peterhead was the most successful on the coast. The value of the catch, which constitutes a record for the port, was £362,000, being an increase of £125,000 as compared with the figures of the previous year. The highest landings in any one season at Peterhead were in 1907, but the value that year was only £277,416. The fishing opened in May,

and from then onwards the results were highly satisfactory. At the beginning of the season the sail-boats had difficulty in getting to and from the fishing grounds, owing to unsuitable weather, but fortunately for them the shoals by the end of June made their appearance at a reasonable distance from the port, with the result that several heavy individual takes were landed. While the sail-boats were working the inshore grounds the majority of the steamers kept operating on the shoals some 60 to 70 miles off. The season was remarkable for heavy takes on both the offshore and inshore grounds. Shots of from 100 to 180 crans were not uncommon. A feature of the season was the high prices paid for sea-salted fish, in consequence of which many boats remained at sea for two nights, salting the first night's catch when it was not considered large enough to proceed with to port.

At the commencement of the season there were about 350 vessels employed, but as the success which attended their efforts got noised abroad, the fleet increased to about 420, including 40 English drifters. The fleet for the whole season averaged 400 vessels—185 steamers, 213 sail-boats, and 2 motor boats. All did exceedingly well, the catch being pretty evenly divided. Steam drifters grossed from £1000 to £2100, the average being £1340. The earnings of the sail-boats ranged from £350 to £1000, the average being £540. Taking into account the fact that the cost of running a sail-boat is much less than that of a steamer, the net earnings of the former are little short of those of the more modern vessel.

To the curers the season was a very hazardous one on account of the high prices paid for the green fish. Although the early herrings were of somewhat better quality than those landed during the previous two or three years, there was a feeling of uncertainty as to how they would turn out on the market. As the season advanced the quality improved, but prices steadily rose until the high figure of 49s. was reached. During the week ended 9th August, upwards of 25,000 crans were landed, which averaged the high price of 41s. per cran. Immediately thereafter there was a sharp fall in the cured market, which was a matter of serious concern to the holders of large stocks. Towards the end of August, the Norwegian fat herring fishing failed, which to a large extent saved the Scottish trade from disaster. It is, however, gratifying to state that about a dozen new firms contemplate embarking in the industry during the ensuing season of 1914.

The herring fishing at Fraserburgh commenced about the midde of May and extended over a period of about four months. The landings fell far short of expectations. Up to the close of July the sail-boats, of which there was a fleet of some 200 to 300 craft, were seriously handicapped in getting to and from the fishing grounds, and many of them made poor earnings. It was not until August that a change in the weather enabled them to make up their leeway. Although the landings show a decrease of 15,000 crans, as compared with the previous year, the value of the catch was the highest on record, the figures being £330,000, as against £250,000 in 1912.

Features of the season were the high prices paid for fresh herrings and the number of heavy individual catches. In July the catch was only one-half of that of the corresponding month in 1912. With such a shortage competition was keen, and prices rose steadily until the high figure of 51s. per cran was reached. The average price for the whole catch was 35s. 7d. per cran, as compared with 24s. 11d. in 1912. The fishing grounds were from 20 to 60 miles N.N.E. of Kinnaird Head, but good supplies were also brought in from 70 to 80 miles E.S.E. of the port. Throughout the season the size of the shoals struck varied greatly, with the result that an occasional vessel would secure a haul of 150 to 200 crans, while others working in the same neighbourhood caught only a few crans. Those who were

fortunate in securing these heavy hauls realised in a single night from £300 to £400. A very remarkable catch of 364 crans, which required the efforts of other two crews and their boats to bring to land, was secured in a fleet of 75 nets. The average earnings of the steamers were from £800 to £1200, and for sail boats £450. The most successful steamer earned £1800. From its commencement, the season, on account of the high prices paid for the green fish, was an anxious one for the curer. Prices obtained for the cured article left no profit. The quality, however, was good, and towards the close of the year very few remained on hand for shipment.

In the districts of Banff, Buckie, and Findhorn the outstanding features of the year were the falling off in the local fisheries and the abnormally high prices realised for all kinds of fish landed. The shortage was mainly due to a scarcity of fish on the inshore grounds referable chiefly to herrings, cod, and haddock. Fortunately, only a small proportion of the fishermen are dependent on the local fisheries. With few exceptions the boats belonging to the above districts prosecute the great summer herring fishing from Wick, Lerwick, Orkney, and other East Coast ports. The average number of boats working from Macduff was 25, Buckie 16, and Lossiemouth 10. The total landings in all three districts amounted to 15,232 crans, as compared with 30,519 in 1912.

At the ports on the Moray Firth from Macduff to Burghhead on the south side, and from Cromarty to Lybster on the north, the landings now are made chiefly by boats home for the week ends to replenish their stores. Following the poor home season came a very successful English fishing which compensated the fishermen for the shortage in the catch. It also meant splendid earnings for fish-workers and the clearing out of stocks of barrels whereby employment for coopers during the winter was assured.

Although in the catch of herrings at Wick there is a decrease of over 61,000 crans, the value compares favourably with that of the previous year. Preparations for the season were on a larger scale than in any previous year. Not only were there a larger number of barrels provided, but considerable stocks of salt were laid in. Up to about the end of July fears were entertained that the fishing would turn out a failure, but with the advent of August a marked improvement set in. Fortunately the shoals made their appearance on grounds which were more accessible than was the case earlier in the season, with the result that some excellent catches were obtained. A feature of the season was the landing of a number of heavy catches of over 100 crans, one of the craft bringing ashore a catch of 200 crans, while another landed 214 crans. During the season of 1912, which was a record one for the port, the highest shot secured was 100 crans. The average price for the season was 38s. 6d. per cran, as compared with 26s. 3d. in 1912. Owing to the keen competition and high prices steamers earned from £1000 to £2000, sailers from £200 to £800, and motor boats from £700 to £1300.

On the whole the hired men had a very successful season. Those on board drifters earned from £25 to £80, while those employed on sail-boats earned from £18 to £60.

The strike among these men for better terms, which at an early period of the season threatened to have serious consequences, was fortunately settled by the men agreeing to accept the conditions offered by the owners of boats and share fishermen. The result of the strike was that a number of West Highland fishermen who usually find employment on East Coast boats were superseded by men from inland centres and also from Ireland.

Fish workers—gutters and packers—also had one of the most satisfactory seasons on record—particularly when the earnings at Yarmouth and Lowestoft are taken into consideration.

It was feared that unless a successful catch was secured in East Anglia to use up the surplus stocks which remained in the hands of curers at the

close of the fishing, coopers would find little employment, but the landings in that quarter were remarkably heavy, and the demand for barrels exceptional in consequence. Barrel-making is confined to the East Coast and Stornoway, and notwithstanding the steady employment given to the men, without the aid of machinery—which the ordinary curer finds it necessary to introduce into his workshop—it would be impossible to meet the requirements of the trade. Another important factor which has a great bearing on the output of barrels by hand labour, is that many of the coopers leave the workshop early in May, whereas in former years it was the beginning of July.

In the early part of the year dense shoals of herrings made their appearance in the Minch and West Highland lochs. The success which attended operations may be gauged from the fact that during the months January to March 103,915 crans of herrings were landed at Stornoway. Again from May to December a good fishing was secured. Altogether 148,983 crans of herrings were landed at £170,756. Except during the month of April, herrings were caught in the Minch in paying quantities from January to December. The presence of herrings in Loch Bracadale resulted in satisfactory landings of herrings in the districts of Loch Carron and Skye and Fort-William. In January over 30 steamers were employed from Mallaig—which port lies quite near the loch—and remarkable catches were made, one of the vessels having earned in a comparatively short period over £500. The quality of the fish was good, and prices were well maintained. Owing to a succession of westerly gales neither the local nor stranger craft were able to work with any degree of regularity.

Although the bulk of the landings in both these districts was made by East Coast crews, many of whom returned home with earnings ranging from £700 to £900, the local fishermen and fishworkers shared in the success in no small degree, with the result that many of the crofter fishermen possessed of old and inferior boats have been enabled to discard these for more powerful craft fitted with auxiliary motor power. Various attempts have been made during the past few years to make Oban a fishing station, but the landings in 1913 were not so satisfactory as those in 1912.

In the 5 fishery districts of the Clyde area the fishermen employed are mainly dependent on the results of the herring fishing. The less important fishings are great and small line fishing, cod and flounder net fishing, shrimp trawling, and crab and lobster fishing.

The total quantity of all kinds of fish landed was 267,773 cwts., valued at £119,784, as against 249,752 cwts., and £99,554 in 1912. Herrings account for 84 per cent. of the total landings and 81 per cent. of the total value.

The most noticeable feature in connection with the means of capture was the increase in the number of motor boats, and as regards Inveraray district this was the more striking when the unprofitable results of the fishings are considered. Altogether in the three principal districts of the Clyde area 34 boats were fitted with motor engines, and it seems probable that in the near future the herring fleets of Campbeltown and Inveraray will consist almost entirely of boats propelled by motor power. Although the results of the fishing in Inveraray district itself were disappointing, the district fishermen secured some excellent catches on the Kintyre, Arran, and Ayrshire coasts, and during May and June 10 boats prosecuted the herring fishing at Loch Boisdale, where good earnings were secured. Owing, moreover, to the keen demand and remunerative prices obtained, the financial position of the fishermen was better than for several seasons back.

Not for many years has the catch of herrings in the Campbeltown district been so successful. In the total landings there is an increase of 18,069 cwts. and £16,202 in value as compared with the previous

year. The method of fishing adopted was the seine net, and it is gratifying to state that several pairs of seiners earned for the year from £1400 to £2000. One very fortunate pair of seiners (8 men) is reported to have earned upwards of £4000, which sum has probably not been reached in any previous year by a single pair of boats in the history of the Clyde fishings.

In the landings of fish in Ballantrae district, there is a shortage of over 12,000 cwts., but an increase of over £4000 in value, as compared with 1912. Owing to the failure of the summer herring fishing, a number of the craft proceeded to the Isle of Man, where they met with a fair measure of success. During the spring months several steam liners hailing from East Coast ports prosecuted the fishing from Stranraer with fair results. The most successful vessel earned over £700.

For several years back the fisheries of Rothesay and Greenock districts have shown little improvement either in herrings or white fish landed. Within recent years there has been a marked change in connection with the white-fish fisheries of both districts; haddock and whiting appear to have deserted their former grounds, while other kinds have also become less plentiful.

The white-fish fisheries of the Clyde districts, with the exception of Ballantrae, are of little importance. The total quantity landed was 43,377 cwts., valued at £22,396, as against 37,731 cwts., and £21,334 in 1912.

It is gratifying to state that no lives were lost in connection with the Clyde fisheries, and the loss of fishing material was insignificant.

The landings of mackerel on both the east and west coasts exceeded all previous records. Possibly not within the memory of the oldest inhabitant on the coast has this fish been so abundant in the waters of the North Sea as during the months of June and July last. The total landings for the year were 74.348 cwts. as compared with 48,010 cwts. in 1912. The shoals remained upon the coast for a much longer period than usual, probably owing to the rich feeding and favourable weather conditions. There was no special net used such as is the case at several of the creeks on the West Coast, their capture being merely incidental to herring fishing. Catches of from 10 to 20 crans were not uncommon. It not infrequently happened that some boats caught from 60 to 70 crans which afterwards they returned to the sea on account of the low prices prevailing. Fishermen attribute the failure of the early herring fishing to the presence of mackerel on the grounds. From both the East and West Coasts large quantities were despatched to the southern markets in a fresh state, and even although prices were nominal (2s. 9d. per cwt.), buyers were slow to purchase them owing to the poor demand and glutted state of the markets. A portion of the catch was tinned. The quantity pickled was 5266 cwts., as compared with 8700 cwts. in 1912, nearly all of which were exported to the American markets.

If treated with the new electrolytic preservative, which has recently been discovered, mackerel, it appears, could be put on the home and foreign markets in good condition from the more remote West Highland creeks, where formerly they had to be destroyed for lack of a preservative. The cheapness of it places it within the reach of all, as the cost is only about a penny per gallon.

J. Skinner,
General Inspector of Sea Fisheries.

Fishery Board for Scotland,
Edinburgh, 24*th February* 1914.

Assistant-Inspector of Sea Fisheries.

In the fishery districts on the West Coast of Scotland, from Oban to Stornoway, and on the East, from Shetland to the Banffshire coast, there was an excellent demand for all kinds of fish, with the single exception of mackerel, and prices ruled higher than usual. Contrasted with the preceding year, there was a marked decrease in the quantity of herring and white fish. At the various places on the mainland, from Oban to Cape Wrath, and in the Isle of Skye, the quantity of herring landed was practically the same as in 1912, with an increased value. In the districts of Barra and Stornoway exceptional success was obtained at herring fishing, the increase for the two districts being some 82,000 crans in quantity, and £101,000 in value, as compared with the preceding year.

In the more important districts of Wick, Orkney, and Shetland, the fishing was comparatively light in the early part of the season, and a partial failure in Shetland waters during the month of July. Thereafter, good results were obtained all over by a greatly reduced fleet, chiefly sail craft, most of the steam vessels having left for the East Coast and North of England stations. For the three districts the catch for the year amounted to 415,700 crans, valued at £742,700, being a decrease of 308,000 crans in quantity, and £230,000 in value, as compared with 1912. As an indication of how the industry is alternately affected by quality, weather, and market conditions, it may be noted that the decrease in value for 1913 was practically the same as the increase for 1912.

As the season advanced in the three Northern districts, there was an increased demand for the cured article at higher prices than in the preceding year, by from 5s. to 10s. per barrel over the various selections. Large, fat fish generally realised from 40s. to 45s. per barrel; medium and small from 30s. to 38s.; large fish cured as matjes occasionally fetched from 50s. to 52s. per barrel. At the close of the season there was a drop in these prices of from 3s. to 5s. per barrel. The shortage in the catch, and the high prices paid to fishermen, made the season unprofitable to curers, and adversely effected the earnings of shore workers. Fortunately, herrings were plentiful on the East Coast, and later on in great abundance at Yarmouth and Lowestoft—to which stations the unused barrels and salt were transferred to good advantage. Fishermen and shore workers, as well as curers, participated in the proceeds, and finished up the year with earnings and profits beyond their most sanguine expectations.

In the fishery districts on the north shores of the Moray Firth, where practically nothing has been done at herring fishing for a number of years in succession, most of the fishermen now find employment from May to November as hired men, chiefly on board craft belonging to the south side of the Firth. A large number of women were also employed for a similar period as gutters and packers in connection with the various fishings, and the combined earnings constitute the principal source of income for the year.

Nearly all the fishermen resident on the south shores of the Firth continue to devote the whole of their time to the various herring fishings on the Scottish, English, and Irish coasts, and their gross earnings for the year were the highest on record. On the stretch of coast from Nairn to Troup Head there was a total of 491 steam drifters on the various registers at the close of the year. The increase for 1913 was 29, and it is fully expected that by the close of 1914 there will be a further increase of 50. The latest additions to the fleet cost £2900 for wood, and £3600 for steel-built craft. Motors were installed in several large sail boats, and a number of small motor boats, suitable for net and line fishing, were built during the

year. There was a further decrease in the number of large sail boats, these being now reduced to a total of 462. Fishermen generally on the stretch of coast under review took full advantage of the navigation classes held for their convenience, and many qualified for the necessary certificate of competency.

In the district of Loch Carron and Skye there was a further increase in the number of small-sized motor boats suitable for net fishing in the Minch. These proved more serviceable and profitable than sail craft of a similar size. In Wick district motors were installed in several large sail boats. In the other West and Northern districts the increase in motors was insignificant, and all over there was a marked decrease in the number of small sail boats formerly used in net and line fishing.

In Barra district the early summer herring fishing was prosecuted with good success. Operations were commenced early in May, and practically closed in the second week in July, by which time the East Coast steam and sail craft had left the district. The local fleet of small sail boats landed light takes throughout the year, and their contribution to the catch did not exceed 10 per cent. The catch for the year was 32,000 crans, or double the quantity landed in 1912. About 16,000 crans were landed in June at an average price of 55s. per cran. For the year the average price was 49s., as against 40s. 6d. in 1912. The earnings of the steam vessels ranged from £500 to £1500; of motor boats from £240 to £720; and of large sail boats from £240 to £715. The small sail boats belonging to the district—a number of which were irregularly employed—grossed from £32 to £375. The small motor boat belonging to the district grossed £543. The comparatively poor success of the district crews is accounted for by a scarcity of fish on the inshore grounds. The large East Coast craft having a wider range of operations fished all over the Minch. A number of fair takes were brought in from the Atlantic side of the Island, which, as usual, were of excellent quality, and realised from 85s. to 91s. per cran. A feature of the season was the success obtained on new grounds, chiefly in Gunna Sound, and off the west side of Mull in the neighbourhood of the Dutchman's Cap. These herrings, however, after being cured, did not realise the high prices invariably obtained for Minch caught fish. Over 21,000 barrels were exported to St. Petersburg alone, and on these curers lost heavily. The white fisheries of the district were less productive by 11,000 cwts. than in 1912. The usual numbers of hired men and gutters and packers engaged in the various herring fishings and their earnings for the year were higher than usual.

As in the preceding year, good results were obtained at herring fishing in Fort-William district, but in the quantity of white fish landed there was a marked decrease, which is accounted for by unfavourable weather conditions, and the increased attention given to herring fishing. Consequent upon the failure of the herring fishing in the lochs and sheltered parts the crofter fishermen have practically ceased to take any part in the fisheries of the district, and the small craft owned by these men are rapidly going to waste. For a number of years in succession the bulk of the herring and white fish accounted for has been caught in the Minch by East Coast fishermen and landed at Mallaig, although Oban is now getting a larger share than formerly. At a number of the many creeks in the district the local men engage in lobster fishing. On an average the value of the shell-fish landed annually amounts to £2600, of which £2000 is referable to lobsters, and the remainder chiefly to whelks. Their share of the net and line caught fish amounts to only about £1500 annually. Of the herrings landed in the district 9000 barrels were cured, 25,000 crans freshed, and 1300 crans kippered. For the year the average price was 26s. per cran, as compared with 23s in 1912. There was a good demand

for all kinds of white fish, the bulk of which was dispatched by rail to the Southern markets.

In the quantity of herring landed in Loch Carron and Skye district there was a considerable decrease, as compared with the preceding year. Weather conditions were so unfavourable during the winter and spring months that only the largest of the district boats could occasionally get to sea. Good takes were, however, occasionally got in Loch Bracadale by steam and motor craft, but at no period of the year was there such an abundance of herring in that loch as in 1912. Fair results were obtained by district crews during the summer months chiefly in and off Loch Snizort. The greater part of the catch was landed and cured at Uig, where accommodation has been provided by the Board of Agriculture and Fisheries. The heaviest of the takes caught by steam and motor vessels were landed at Mallaig and Stornoway. There are now 20 small-sized motor boats on the register, and the earnings of these for the year ranged from £200 to £500, with an average of £300, as compared with an average of £380 in 1912. The earnings of sail boats of a similar size ranged from £50 to £180. As usual, mackerel of superior quality were fairly plentiful in the neighbourhood of Kyle of Lochalsh, and for these there was a good demand in the English markets. A considerable quantity of saith and hake of excellent quality was caught with net in Loch Carron. Saith realised 4s. per cwt., and hake 20s. per cwt. The value of line-caught fish varies very little annually, and amounts to about £3000. The shell-fish fisheries of the district are of more importance and realise about £5000, chiefly for lobsters.

As in the preceding year, poor results were obtained at herring fishing in Loch Broom district, the total for the year amounting only to about 5000 crans, at an average price of 25s. per cran. About half the total was landed during a week or two in September, when there was every appearance of a dense shoal of herrings in the neighbourhood of Loch Broom. The fleet then at work included a number of large sail boats from other districts, many of which did not refrain from fishing during the daytime, and the district fishermen assert that this not only prevented the herrings from entering the loch, but caused them to settle down in deep water where they could not be caught, Be this as it may, the fleet rapidly dispersed, and no more herrings were caught until the last days in the year. About the usual quantity of white fish, some 14,000 cwts., was accounted for, chiefly cod—a large portion of which was caught by nets from close inshore up to 10 miles off Gairloch.

In Stornoway district the herring fishing was prosecuted with unprecedented success during the first quarter of the year. In the three months a total of 107,578 crans was landed at an average price of 16s. per cran, as compared with 13,538 crans at the same average price during the corresponding period in 1912. From the beginning of May to the close of September the catch, although good, was lighter than in the preceding year. During the summer season the best results were obtained during June and July, when the quality was at its best. The total for the two months was 17,428 crans at an average price of 44s. 4d. per cran. In the last quarter of the year the catch was light and partial, yet the year closed with a substantial increase in quantity and value as compared with 1912.

A small portion of the year's catch was kippered and freshed. For the herrings cured early in the year, and exported, chiefly to Germany and Russia, there was a good demand on the spot at from 20s. to 26s. per barrel, and to curers and shore workers the results were highly satisfactory. Those cured during the summer and autumn months were nearly all consigned unsold, and a larger portion than hitherto went to America. Sale returns for large, fat fish generally ranged from 48s. to 50s. per barrel; medium,

43s. to 45s.; and small, 33s. to 36s. Higher prices were occasionally obtained, but as usual curers had to contend with some bad sales, and their profits did not amount to very much. Consequent upon the success of the fishing in the early part of the year there was a demand by East Coast curers for accommodation at Stornoway, and in a short time all the available yards—many of which had not been let for a number of years—were occupied.

In the catch of white fish (some 70,000 cwts., there was a considerable decrease as compared with 1912. Ling, cod, and saith were the most plentiful, and a small portion of these were cured for exportation. Mackerel were in great abundance, and takes ranging from 10 to 70 crans were caught in the herring nets all along the outer islands from Barra Head to the Butt of Lewis, thousands of crans having to be thrown back into the sea owing to the lack of demand for them. About 2000 crans of the best quality were landed, and of these 500 barrels were cured. These heavy takes of mackerel proved so destructive to the fine nets used for herring fishing that several vessels had to discontinue fishing and return to the East Coast to get their nets repaired.

In Shetland waters the summer herring fishing was commenced early in May and closed in September, For the rest of the year the catch did not exceed 8000 crans. Extensive preparations were made for curing and the requirements of the industry. By the beginning of June a fleet of 612 steam and 200 sail was engaged. From the beginning of the season indifferent success was met with, and by the middle of June the fishing had become so light and partial that the steam fleet had commenced to leave for the Aberdeenshire coast. During July the fishing was a comparative failure, and the steam vessels had nearly all left the district. Thereafter there was a decided improvement, which induced a number of steamers to return. These and the district sail fleet fished well to the close of August, when the fishing again got light, and closed abruptly early in September. For the year the total catch was 202,657 crans, at an average price of 32s. 9d. per cran, as compared with 398,215 crans, at an average price of 26s. per cran in 1912.

When most of the steamers departed, curers realised that they were to be left with an extraordinary quantity of curing stock for which there was a shortage of storage accommodation, and several of the largest establishments lost no time in removing their workers to the East Coast and North of England stations; others reduced the number of workers, but kept their stations open till the close of the season and used up a fair portion of their stock. It is gratifying to record that the success of the fishing in August benefited the industry to a great extent and enabled the Shetland sail fleet to finish up the season with record earnings. A number of the most successful crews grossed from £800 to £1200, the average being about £500. Curers and shore workers generally had, however, an unprofitable season.

The white fisheries of the district were less productive by about 17,000 cwts. than in the preceding year, unfavourable weather conditions during the spring and winter months being chiefly accountable for the shortage. As in the preceding year, great quantities of saith fish were caught during the summer months with hand lines and rippers by men on board the herring fleet.

Fishcurers and shore workers commenced to arrive in Orkney district in the beginning of May, and in no past season were such extensive preparations made for the summer herring fishing. In the number of shore workers there was a marked increase. Curing stations generally were improved, and a new one constructed at a cost of £1600. There was also an increase in the number of coal hulks for supplying the steam fleet.

The success of the fishing in recent years, and the rapid development of Stronsay into an important centre, caused curers to expect an increase in the steam fleet, and a corresponding increase in the catch, whereas there was a marked decrease in both. This, along with a scarcity of fish in the early part of the season, resulted in a shortage of 63,600 crans, as compared with 1912. Of the season's catch 90,846 crans, or 85 per cent., were landed at Stronsay, and the balance at Holm, Burray, Kirkwall, and Sanday.

From the beginning of the season competition was keen, and prices ruled higher than in any past season on record. The general range was from 35s. to 45s. per cran, and the average 40s. 10d. per cran, as against 28s. 9d. per cran in 1912. There was also a good demand for the cured article at correspondingly high prices until near the close of the season, when there was a drop of from 2s. to 5s. per barrel in the various selections. Throughout the season curers were selling on a doubtful margin, and as there was a considerable quantity on hand at the close of the season these must have been sold at a distinct loss.

In the quantity of white fish accounted for by district fishermen and English trawlers there was a marked decrease. The former were credited with 10,810 cwts. and the latter with 7137 cwts. As in the preceding year, Faroe and Dutch craft brought in considerable quantities of wet salted cod, which were dried at and exported from Kirkwall. In a wet salted state the price was from £18 to £19 per ton, against £15 to £16 in the preceding year.

In Wick district the summer herring fishing was prosecuted with indifferent success. Contrasted with the preceding productive season the shortage was 60,000 crans. In the early part of the year, however, particularly during the month of January, dense shoals of herring were discovered off the North Coast of Sutherlandshire, where very few herrings have been caught for many years, the shortage being thereby reduced to 49,000 crans. Prices throughout ruled exceptionally high, and the value was practically the same as in 1912. The average price in 1913 was 37s. per cran, against 26s. in 1912.

As in the other two Northern districts, preparations were made on a larger scale than hitherto, but at no period of the season was there such a large number of vessels employed as in the preceding year. This may be accounted for by the partial failure of the fishing in the early part of the season. For the month of May there was a shortage of 13,770 crans, and at the close of July it amounted to 87,000 crans. The improved catch for August was over 50,000 crans, at an average price of 40s. per cran. To the reduced fleet, which remained to the close of the season, the financial results were much better than in 1912. The earnings of the steam vessels ranged from £1000 to £1900; of motor boats, £700 to £1500; and of sail craft from £200 to £700. The earnings of shore workers generally compare unfavourably with those of recent years. Throughout, the quality was all that could be desired, and the prevailing cool weather enabled the cured article to be placed on the market in good condition. The shortage in the catch, and heavy incidental expenses, together with the high prices paid to fishermen, rendered the season an unprofitable one to curers. In the quantity of the various kinds of white fish landed there was an extraordinary decrease, which was due chiefly to the unfavourable weather conditions which prevailed.

In the early summer months light takes of herring were occasionally got in the inshore grounds of the Moray Firth. These were generally of good quality, and were in demand for local use. In the three districts of Findhorn, Buckie, and Banff, the total landed amounted to 13,835 crans, as compared with 23,043 crans in 1912. The bulk of these was brought in by steam craft returning at the week-end for coal and stores.

As in the preceding year, fair success was obtained at cod net fishing in the districts referred to by a small fleet of steam and sail craft, the takes obtained generally ranging from 5 to 10 score, the highest shots running up to 20 or 30 score. For the three districts the total catch was 50,697 cwts., valued at £23,815, or a decrease of 6924 cwts. in quantity and £2084 in value, as compared with 1912. A total of about 5000 cwts. was also landed at Wick and other places on the North shores of the Firth. Prices generally ranged from 10d. to 1s. 6d. per fish, and occasionally from 2s. to 3s. 6d., the average being 9s. 5d. per cwt., as against 7s. 5d. in 1912. The best results were obtained in February and March. A portion of the catch was split and cured for exportation, but the bulk was, as usual, immediately dispatched to the Southern market in a fresh state.

The results obtained at small-line fishing on the inshore grounds of the Firth from Wick to Gardenstown on the Aberdeenshire coast compare unfavourably with those of 1912. In the quantity of haddock alone there was a decrease of about 26,000 cwts., which is partly accounted for by a decrease in the number of men employed and the most unfavourable weather conditions which prevailed during the spring and winter months. Takes, however, were much lighter than usual, and not for many years has there been such a scarcity of small-sized haddocks in the Firth. Towards the close of the year there was a considerable improvement in the takes, and several large boats fishing from 18 to 20 miles off landed good takes, chiefly of haddock.

As in the preceding year, the herring and sprat fishing in the Inverness and Beauly Firths was a failure.

During the spring and winter months a large number of steam drifters were laid up in the Caledonian Canal and neighbourhood. The patent slip at Inverness, constructed for repairing fishing craft, continues to be appreciated by fishermen. Four steam drifters were launched, and two others were in course of construction at the close of the year. A number of orders for steam craft for 1914 have had to be refused, chiefly owing to the difficulty in getting experienced workmen.

WILLIAM JEFFREY,
Assistant-Inspector of Sea Fisheries.

FISHERY OFFICE,
INVERNESS, *5th January* 1914.

II.—EAST COAST.

Eyemouth District.

The most noteworthy feature of the past year was the high prices obtained for all kinds of fish—records being established for herrings, codlings, and haddocks—otherwise there was no marked difference from the previous season. As compared with 1912, the returns exhibit increases of 12,612 cwts. in quantity, and £3306 in value. The total value, including that of shell-fish, is the highest since 1899. For curers the home herring fishing was only moderately successful, but those who went to Yarmouth and Lowestoft had again a most successful season. The fishermen, in general, did well at the home, Irish, and English herring fishings. As regards quantity, no improvement can be recorded in line fishing in either section of the district.

The slight decreases in netting and lines call for no special mention. In the English section there was a considerable decrease in boats and tonnage. The port of Blyth was expected to become a first-rate trawling station, but, owing to financial difficulties, 19 steam trawlers were sold, and

the remaining 10 now fish from other ports. In the Scottish section several motor boats and steam drifters have been added to the fleet, making a total of 10 steam drifters, 41 motor herring boats, and 3 motor yawls. The prospects for the present year are that 4 motor boats and 11 steam drifters will be added to the fleet.

The summer herring fishing was opened as usual early in May at North Shields and Eyemouth, and later in the month at the other ports in the district. The prospects during the early part of the season were considered good, but expectations were not realised, more especially in the northern ports. During the first two months the fleet was small, but early in July the failure of the fishing at Shetland and the East Coast induced a number of curers and fishermen to proceed south to Blyth and North Shields, and towards the end of the month there was a record fleet for the district of 524 vessels. Of these, 378—mostly steam drifters—fished from North Shields and Blyth. With the exception of a couple of days at North Shields, at no time did the supply exceed the demand, and with the increase in the number of buyers and the keen demand, prices were generally at figures which did not leave much margin for profit to the curers. Fortunately, however, the demand for the cured article was good all through the season. While the landings at North Shields and Blyth constitute records for these ports, the other stations were lightly fished, although all show slight increases upon the returns for the previous season. While the fishing was practically closed by the second week of September, a number of trawlers continued operations till the end of October, the highest number employed at one time being 31. They landed a total of 16,427 crans, which realised an average price of 26s. 1d. per cran. Including the trawled herrings, the total catch for the district was 244,219 crans, as against 129,546 crans for the previous year. Prices ranged from 4s. to 50s., with an average of 28s. 3d. per cran, as compared with 24s. 1d. in 1912. Only once has this average been exceeded during the last thirty years.

In general, the early herrings were of a keepable nature, and as the cured market was in a healthy condition, curing was conducted on a larger scale than usual. In 1912 the percentage cured for export was about 19, while last year it was 42. Shipments were carried on briskly, so that few barrels remained on hand by the end of September. The principal fishing grounds were from 10 to 20 miles N.E. to S.E. of the Farne Islands, and 30 to 40 miles S.E. of Blyth.

Besides the 119,421 barrels of herrings exported direct, 16,472 were sent coastwise, and 4276 by rail to Leith for exportation to the Continent; also 791 by rail to Glasgow, and 266 coastwise to Liverpool, for exportation to America. The small proportion sent *via* Leith was due to a strike at that port during the early part of the season.

While the number of boats engaged in the line fishing was about the same as in the previous year, the quantity of haddocks landed shows a considerable decrease, but with higher prices the value was practically the same. With the exception of 1902 the catch is the lowest on record. The fishing grounds were from 3 to 8 miles offshore, only a few trials being made on the more distant grounds. The total landings of line-caught fish were slightly below those for the previous year. Haddocks realised from 7s. to 38s. per box, with an average of 28s. 8d. per cwt., as compared with 21s. 3d. in 1912. This constitutes a record.

The value of the shell fisheries was slightly above that for 1912, and slightly below the average for the last ten years. Crabs realised from 2s. 3d. to 3s. 9d. per score.

In barrel-making the conditions were similar to those of 1912. A short fishing left curers with large stocks, but these were disposed of during the English autumn fishing, which was a record one. All available coopers are engaged for the present year.

The work of boatbuilders was confined to the alterations in boats having motor engines installed, and any slight repairs.

The 11 crews at the Irish herring fishing had good success, the average earnings amounting to £520 per boat. Last season was the first occasion on which there were no sail boats at the English autumn fishing. There was a wide range in the earnings of both steam drifters and motor boats. The average for the former was £286 above 1912, while that for the motor boats was less by £67. The average loss of netting was normal—about £15 per boat.

There were no casualties during the year.

TABLE showing the Number of Boats employed in each Week during the Herring Fishing Season of 1913, the Highest Shots and Weekly Landings, with Prices obtained for Fresh and Cured Herrings.

Week ended.	Number of Boats.			Highest Shots.	Total Catch per Week.	Average Prices for Fresh Herrings.		Average Prices of Cured Herrings.		
	Steam.	Motor.	Sail.							
1913.				*Crans.*	*Crans.*	*Per Cran.* s.	d.			
17th May	58	34	14	40	2,293	19	11			
24th „	61	40	18	34	3,332	19	7			
31st „	64	44	21	43	5,666	15	2			
7th June	59	41	36	41	5,233	19	0			
14th „	61	41	42	70	8,615	23	6	La. Full,	42s.	0d.
21st „	76	39	35	116	12,711	15	5	Full,	38s.	1s.
28th „	129	42	60	60	13,770	18	11	Mat. Full,	35s.	7d.
5th July	142	45	80	91	22,756	17	10	Filling,	37s.	1d.
12th „	173	45	71	64	13,109	30	11	Mattie,	33s.	1d.
19th „	359	52	91	90	27,433	33	1	La. Spent,	29s.	0d.
26th „	370	51	103	95	21,503	35	2	Spent,	28s.	2d.
2nd Aug.	340	61	103	80	28,508	32	5			
9th „	382	42	72	85	20,642	34	0	Branded,	34s.	10d.
16th „	213	38	99	101	11,164	37	7			
23rd „	182	39	86	71	11,566	35	6	Unbranded,	32s.	11d.
30th „	170	34	63	214	11,641	30	3			
6th Sept.	66	23	22	101	7,778	30	7			
13th „	48	26	24	147	6,039	28	3			

DAVID ROSIE,
Fishery Officer.

FISHERY OFFICE,
BERWICK, 10*th January* 1914.

Leith District.

There was little change in the progress and results of the fishing industry of this district during the year under review. In brief, its principal features were a decrease, as compared with the preceding year, in the number of trawl vessels, a decrease in the landings of the trawlers but an increase in their earnings; moderate line fishing results, and comparative failure of the herring and sprat fishings.

Although a good many changes took place in the course of the year in the composition of the steam-trawl fleet, owing to sales and purchases, the average number of vessels at work was about 65, nine fewer than in the

preceding year. As a rule, about 40 of the trawlers worked for the most part on the near grounds about 10, 15, 20, 30 to 60 miles in the radius from S.E. to N.E. from the May Island, and these as a rule accomplished two landings per week, the range of their catches being usually about 20, 30, 40, 60 to 100 boxes. About 25 of the vessels made weekly trips, and operated principally about 100 to 160 miles E. and S.E. of the May Island, and northwards to as far as 100 to 130 miles E. and N.E. from Girdleness. Their catches were usually from 80, 90, 100, 200 to 360 boxes, the highest for the year being about 450. Contrasting the aggregate trawl catch with that of the preceding year, it is seen that the landings declined in 1913 by 12,303 cwts., but that the increase in value was £12,299. The aggregate value of the year's catch (£191,031) was the highest ever reached, but during the last three years, while the quantity landed has been declining, the value has been steadily increasing. In regard to the composition of the trawl catches, the scarcity of haddocks seems to become more evident year by year. Large cod and nearly all kinds of flat-fish appear to be decreasing in the catches, but the returns show a considerable increase in whitings. Notwithstanding the decrease in the landings, the earnings of the fishermen were greater than formerly in consequence of the higher prices realised for all kinds of fish. In common with most of the food commodities in daily use, fish has in recent years shown a marked increase in price. This has been caused by well-known economic conditions which have been in operation for some years, and which have affected the fishing industry in particular, viz., increases in the wages of the workers and in the cost of the material—vessels, gear, coals, ice, etc.—employed in catching and marketing the fish. A few years ago it was a favourite maxim that fish provided a cheap and appetising food supply, especially for the poor. This is not now quite so true as formerly, because, in consequence of the decreasing catches and the longer trawl voyages, the price and quality of the fish have been moving in inverse ratio. During the spring and winter when fish were scarce, it was not unusual for 80s. to 140s. per cwt. to be paid for prime flat-fish ; and 6s. to 8s. each for cod-fish, while small haddocks—the staple of the fish friers' trade—which a few years ago had a market value of about 4s. to 8s. per cwt., were often current this year at 12s. to 16s., and on a few occasions rose as high as 30s. and 32s. Indeed, high prices seem to be the predominating feature ; less than twenty years ago the average price of a cran of herrings was seldom over 20s., and of sprats about 8s. or 10s. ; now both these rates have about doubled. While affording, perhaps, better results to the fishermen, these high prices have pressed hardly upon the small retailers and fish-friers, who, it is feared, must have been losers in their endeavours to provide supplies at or near the rates to which their customers were formerly accustomed. But the chief point is that these higher values are the outward and visible sign of a new set of conditions in the trade, whose cause and trend are of national importance.

As compared with some northern fishing communities in Scotland, the fishermen of this district have been slow in acquiring steam and motor boats in place of the sail boats. They have all along been desirous of making the change, especially at Cockenzie, Port Seton, and Fisherrow, but they have not, in many cases, possessed the necessary capital, nor had they the advantage of the outside financial aid which some other communities were fortunate in obtaining at the commencement of the transition a few years ago. At present there are about 70 large sail boats, 10 steam drifters, and 6 motor boats, all of which usually fish solely at the large English centres. Besides these, 12 yawls, principally engaged in line fishing at home, were fitted with motors in the course of the year. The large boats are always employed in the herring fishing,

principally from Northumberland ports in summer, and at Lowestoft and Yarmouth in the autumn. Their summer fishing this year was not very successful. It was unfortunate that not more than 25 of the fleet participated in the most successful Yarmouth fishing, but these did well, the steamers having average gross earnings of £763, the motor boats £450, and the sailers close on £300. As regards the line yawls recently fitted up with motor engines, the crews have appreciated the change in improved catches, but more especially in the greater facility with which they can manœuvre the boats, sail to the more distant fishing-grounds, and set and haul their lines regardless of wind and tide.

The home herring fishing, which is pursued in the Firth of Forth, had poor results ; that is, poor in comparison with the good fishings of about half a century ago. The season usually extends from January to April, and some 60 to 70 yawls are employed in it. The year's catch, from all sources, was 3579 crans, and the value £6997. The average price, it will be seen, was almost 40s. per cran, the highest the fishermen here ever obtained, and although the catch was small, the high prices largely compensated for the deficiency.

For the second year in succession the sprat fishing failed, the catch being small in comparison with previous successful seasons. As a rule, 8s. to 12s. per cran used to be the range of prices paid for sprats, but owing to the scarcity of the fish, and to the higher place they have taken of late as a substitute for the now very scarce sardine and anchovy, the price for last season's supply averaged 23s. per cran.

Line fishing, in which some 60 to 80 yawls are employed, appears to be still on the decline. The results were about the same as in the preceding year. Fishermen continue to complain of the scarcity of fish on the inshore grounds, and are regarding this branch of the industry with less and less favour.

The crab and lobster fisheries were carried on principally from Dunbar and Cove, villages near which favourite haunts of these shellfish have always existed. Good results were obtained, chiefly during the first half of the year, April proving the most productive month. The year's catch was valued at £5289, an increase of £358 as compared with the preceding year, and fully two-thirds was obtained from crabs and clams.

A considerable quantity of partially-cured cod-fish was brought into Leith in the course of the year from Iceland and Faroe by vessels belonging to these islands and by the regular trading steamers ; and supplies of the same kind were brought from Hull and Grimsby. Owing, probably, to the failure of the Swedish winter herring fishery comparatively light consignments of these were delivered at Granton this year, but supplies of Norwegian herrings continued to come into the district *via* Hull, but instead of coming, as formerly, iced fresh, they have of late been coming already kippered.

The exportation of cured herrings at Leith is an extensive trade. During summer 3 steamers sail weekly for Hamburg, 2 for Stettin, 1 for Dantzig, 1 about once a fortnight for Konigsberg, and 2 for Russian ports. The facilities thus provided by Leith shipping companies are largely taken advantage of by the exporters of herrings and other kinds of fish throughout Scotland and the north of England. The shipments *via* Leith during the year totalled 203,308 barrels, a decrease of close on 20,000 barrels in comparison with the preceding year.

The various industries connected with fishing, such as barrel, net, ice, and basket manufacturing, were actively carried on.

On the whole the weather was moderately fair and generally favourable for the prosecution of fishing. Unfortunately, five lives were lost in the course of the year. One yawl was wrecked, but excepting the ordinary

loss of fishing gear which is unavoidable in the fishing industry, no serious losses took place.

None of the local harbour extension schemes which were referred to in the preceding year's report has as yet been commenced.

JAMES INGRAM,
Fishery Officer.

LEITH, 21*st January* 1914.

Anstruther District.

The year 1913, so far as the fisheries which are carried on within the limits of this district were concerned, proved only moderately successful. The catch, compared with that of the preceding year, shows a considerable falling off, but, owing to the enhanced prices which were realised during the past year, there was only a slight decrease in the total value. The falling off in the catch was chiefly referable to herrings, which alone showed a shortage of 18,677 cwts. Prices of all kinds of fish showed a general increase. The average price (exclusive of shell-fish) was 9s. 3d. per cwt. compared with 7s. 7d. in 1912.

The most noticeable feature in the means of capture returns is the comparatively large increase in the number of motor boats. Hitherto the motor-driven craft have not found much favour in this district, but at last the majority of the fishermen seem to be convinced of their utility. No less than 17 motor engines were installed in sailing boats during the past year—2 in boats of 45 feet keel and upwards ; 9 in boats of from 30 to 45 feet keel ; and 6 in boats of from 18 to 30 feet keel. The fitting of motors in boats of from 30 to 45 feet keel is a new experiment in this district. These boats are intended for the prosecution of the winter inshore herring and great-line fishings. The motors were installed towards the close of the year, and the experiment will be watched with great interest by the fishermen. The small motor boats were almost exclusively used for small-line fishing. Their operations were attended by a gratifying amount of success, The motors installed were of the following types :—" Gardner," " Kelvin," " Grei," and " Bolinders."

Four steam drifters were added to the fleet during the year, and negotiations are now completed for the purchase of 4 more vessels of this class.

The decline in the number of sailing boats, which has been going on for the past few years, continues, 25 first-class boats being removed from the registry. Ten years ago 345 first-class sailing boats were owned in this district. This year the number is reduced to 209. In the same period the number of steam drifters and large motor boats has increased from 7 to 68, and the total value of all fishing vessels has gone up from £110,229 to £177,415.

The winter herring fishing—the most important fishing in this district—was commenced as usual about the second week of January. Herrings, during the early part of the season, were scarce ; indeed, for a time it looked as if the fishing was to be an entire failure. During February and March the results showed a slight improvement, but never during the season were adequate supplies obtained. Most of the catch was secured on the inshore grounds by means of anchored nets. The total catch for the season amounted to 8927 crans, compared with 16,762 crans for the season of 1912. The demand for fresh herrings continued exceptionally good throughout the season, and satisfactory prices were obtained. The average price per cran was 27s. 5d., against 22s. 4d. in the corresponding season of

the preceding year. A portion of the catch was forwarded to continental markets in a fresh state, only a small quantity being cured.

The summer herring fishing in this district is subject to considerable fluctuations, and the catch is usually largely made up of landings by crews returning home for week-ends. During the early part of last season, however, a few crews fished regularly from the district, and their efforts were attended by a considerable measure of success. The herrings were obtained chiefly about 50 miles S.E. of the May Island. About the end of July the fishing fell off. Small quantities were landed weekly till the middle of September, when the season closed with a total of 7784 crans, an increase of 2508 crans on the figures for 1912. Most of the catch was cured for exportation.

The majority of the district fishermen fished from northern stations during the summer season. For them the season proved highly successful, their earnings being even greater than in the season of 1912, which was considered most remunerative. The earnings of the crews of steam drifters varied from £580 to £1700, while the more fortunate crews of sailing boats grossed from £700 to over £1100.

The local steam fishing vessels were employed at great-line fishing for a few weeks in spring, but the results were not encouraging. Fewer takes than usual were landed in the district, preference being given to Aberdeen, Newhaven, and English ports. Small-line fishing was regularly prosecuted, a number of small motor boats being employed. The catch was less than that of 1912, but the value was greater. As showing the general rise in the price of fish it may be mentioned that the average price realised for cod and codlings was 12s. per cwt., and for haddocks 21s 2d. per cwt., as compared with 9s. 6d. and 17s. 4d. respectively in 1912.

The codling and plaice net fishing which is carried on in St. Andrews Bay was unsuccessful. Plaice showed a falling off of almost 22 per cent.

The sparling and sprat fishing which is carried on principally from Newburgh was of little importance. Most of the sprats landed were sold for manure.

Lobster fishing received more attention than in 1912, and the catch was greater. Crabs were less abundant, but higher prices were realised. During the year there was an improvement in the demand for mussels, and the output exceeded that of 1912 by 2442 cwts.

One hundred and three crews—61 steamers, 7 motor boats, and 35 sailing boats—belonging to this district prosecuted the autumn herring fishing on the English coast. The crews of steam drifters and motor boats experienced a most successful season. Unfortunately, the earnings of the crews of sailing boats were less satisfactory. The gross earnings of the steamers varied from £416 to £1421. Motor boats earned from £305 to £460, and sailing boats from £60 to £350. The loss of fishing gear on the English coast was greater than usual, it being estimated that the fishermen from this district suffered to the extent of about £3000. One of the district sailing boats was lost off Yarmouth, and a Cellardyke fisherman lost his life through falling overboard while his vessel was returning home.

Barrelmakers were fully employed throughout the year, all kinds of barrels finding a ready sale. The boat-building trade continued inactive, only 3 small boats being built in local yards.

The fishery barometers placed at St. Monans, Cellardyke, Crail, and St. Andrews are kept in good order.

WILLIAM KEIR,
Fishery Officer.

FISHERY OFFICE,
ANSTRUTHER, *8th January* 1914.

Montrose District.

The prosecution of the different branches of the fisheries in this district during the year 1913 was again, unfortunately, attended with unsatisfactory results. So far as the herring fishing was concerned, the catch was the poorest on record, and the sprat and haddock fishings were comparative failures. The total quantity of white fish landed in the district for the year shows, when compared with the catch of the previous year, the rather large deficiency of 23,794 cwts., but there was an increase in value of £677, this latter fact being solely due to the high prices paid for fish of all kinds consequent on their scarcity.

The means of capture returns are again noteworthy on account of the continued progress made in the installing of auxiliary motor-power into fishing skiffs. Since the returns for 1912 were compiled, 34 boats have been fitted with motors, but only 2 of these were large first-class boats. The popular motor craft in this district are still those skiffs and yawls ranging from 25 to 40 feet keel. The larger boats of this type have proved to be eminently adapted for both line and net fishing, which means that they are almost constantly engaged at some method of fishing, whereas the large first-class motor boats are invariably laid up for almost six months every year. Another strong factor which is much in favour of the large auxiliary skiff is that when new it only costs £450, as compared with £1400 for a new large first-class boat with motor-power installed. The favourite types of motors were the Kelvin, Gardner, and Alpha, all of which are giving satisfaction in most respects. The limited liability company formed at Johnshaven during the latter part of 1912 own 4 motor skiffs, and but for the difficulty experienced in getting suitable crews in the village to man them, the probability is that the company would have a larger fleet by now.

As already stated, the herring fishing was a complete failure, and coming as it did after a poor season in 1912 its bad results were of course more acutely felt. The fishing began about the middle of June, and operations were regularly pursued until towards the end of August, when the season closed. At no time during the summer were there any indications of the presence of a large shoal of herrings, either in the inshore or offshore waters of the district. The largest proportion of the small catch landed was caught in the distant waters off the Berwickshire coast, where on several occasions some big shots of fine herrings were secured and brought to Montrose. Owing, no doubt, to their success there in former years, the local fishermen nearly all favoured operating on the southern grounds. Had they, however, fished in a more easterly direction the likelihood was that their arduous and unfruitful labours would have been attended with much better success, as on many occasions large catches of herrings were landed at Aberdeen, which were got in the waters bearing about 75 miles east from Scurdyness. Again, owing to the exceptionally calm and clear weather that prevailed during the greater part of the season the herrings did not seem to rise so readily to the surface as they used to do, and as the fishermen in general did not adopt the practical methods of those pioneers of the herring fishing the Dutchmen by lengthening their buoy ropes they were seldom able to secure good catches. Much of the success which attended the Dutch fleet off our coast last year was said to be due to their circumventing the prevalent weather conditions by lengthening their buoy ropes, and thereby allowing the nets to sink further, so as to meet the herrings.

The quality of the herrings landed was, as a rule, good, and the demand was always brisk owing to the scant supplies. The season's average price

per cran was 31s. 5d., as compared with 23s. 3d. in 1912. Very few boats belonging to other districts landed their catches at any creeks in this district, owing to the non-success of the fishing off this coast. The total catch for the year was only 3668 crans, as contrasted with 8242 crans, and 16,980 crans for the years 1912 and 1911 respectively. The average gross earnings of the steam drifters at the Scottish fishing were £773, motors £210, and sailers £146. To curers, fishermen, and all others connected with the trade the failure of the home herring fishing was very unfortunate, and unless better results are obtained in the near future, the succession of barren years is bound to have a deterrent effect on the general prosperity of the district fisheries.

While the quantity of sprats caught in the Tay exceeds the catch of the previous year (which was a failure) by 638 crans, the season cannot be termed as other than a failure. The sprats, which were all caught in January and December, were extremely small, and consequently fishermen had on many occasions much difficulty in disposing of their catches, which sold at an average price of 6s. a cran.

Small-line fishing, which forms an important branch of the district fisheries, was prosecuted with poor success. Stormy weather during the early and latter parts of the year retarded its regular prosecution, and this fact, combined with the great scarcity of haddocks, was mainly responsible for its non-success. The quantity of haddocks landed by line boats was 7018 cwts., while the average annual catch of line-caught haddocks during the ten years previous to the year under review was 14,604 cwts. But for the number of motor craft employed—44—the catch would have undoubtedly been the smallest in the annals of this fishing. These useful boats were a gratifying success at small-line fishing, particularly so when a comparison is made between their doings and those of the sailing skiffs of a similar size, over which they in every respect easily demonstrated their superiority. The catches of the motor skiffs were usually double those of the sailers.

Trawling operations were again carried on chiefly from Dundee, by the 12 local trawlers. The favourite fishing grounds were those lying from 5 to 100 miles S.E. and E.N.E. of the Bell Rock, and 20 to 50 miles E.N.E. from Rattray and Kinnaird Heads. Compared with the catch of 1912 there was a shortage last year of 841 cwts., and an increase in value of £4952. The average annual quantity of trawled haddocks landed in the district during the ten years previous to 1913 was 45,901 cwts., while last year's catch of these fish was only 24,363 cwts. As a result of the continued increase in the price of coals and all other commodities necessary for the equipment of trawlers the financial results—notwithstanding the higher prices realised for fish—were not considered lucrative. The sum earned by the most successful trawler last year was £4100, and £127 represented the value of the highest individual shot. The average catch per arrival was 53·53 cwts., and the value £39, as against 51·50 cwts. and £31 a trip respectively in the previous year.

The shell-fish returns are, with the exception of those pertaining to crabs, less than those of the preceding year. Crab fishing proves to be a remunerative and easy occupation for a number of crews, and it is likely to receive more attention during the ensuing season.

Fewer boats fitted out for the spring great-line fishing, and those which did pursue it were unsuccessful.

Fifty-two boats proceeded to the autumn herring fishing at the north of England ports, but the voyage there was not profitable, the average gross earnings of the drifters being about £149, motors £134, and sailers (which were longest there) £149 each.

The crews who went to Yarmouth and Lowestoft, however, had a

most successful season. The average gross earnings of the drifters amounted to £775, motors £279, and two sailers £124 each.

Unfortunately, two Arbroath fishermen were washed overboard in July and drowned, and a Broughty-Ferry fisherman was drowned in the Tay in October.

The loss of and damage to fishing gear both at the Scottish and English fishings were below the average of previous years.

No fishing vessels were built in the district during the past year, but several orders for the building of steel trawlers and drifters have recently been received by the shipbuilding firms at Dundee and Montrose respectively.

Coopers are assured of regular employment at increased rates of wages, a fact entirely brought about by the big demand for barrels from the East Anglian stations.

Classes in navigation were creditably conducted at Ferryden by the local schoolmaster, and all the fishermen who attended these classes and went forward to the Board of Trade examination, which was held at Dundee, secured certificates of competency as skippers of fishing vessels.

The barometers at Arbroath and Broughty-Ferry are well attended by the custodians, and are much appreciated by fishermen.

FREDERICK FRASER,
Fishery Officer.

FISHERY OFFICE,
MONTROSE, *7th January* 1914.

Stonehaven District.

The weather throughout the year 1913 was generally favourable for conducting fishing operations, but owing to the practice of landing catches at Aberdeen the catch of both herrings and white fish was the smallest ever landed in the district. The combined catch of herrings and white fish shows from the previous year's total the very considerable decrease of 13,598 cwts. in quantity and £4243 in value. A slight increase (£232) appears in the value of shell-fish.

With regard to the means of capture returns there is again to be recorded a decrease in the number of fishermen and fishing boats, with a corresponding decrease in the extent and value of fishing gear. The industry in the district is rapidly declining in all its branches. As the fishing boats become unseaworthy, fishermen, not being in a position to replace them by new ones, seek other employment. In the spring season, to encourage the industry, a small private company fitted up and hired out 2 large second-hand yawls with motors for line fishing. The smaller of the two, however, has now been laid up for fully six months, the scarcity of fish on the coast making it difficult to get the venture to pay.

An early commencement was made at the summer herring fishing. Unfortunately, however, the season turned out a failure, and operations were discontinued early in August on account of the scarcity of herrings. Three of the boats took their nets ashore and gave up fishing, while the others proceeded to Scarborough. The total catch for the Stonehaven season amounted to only 380 crans. Fishermen went to sea for several weeks in the latter end of the season without landing a single cran.

During the early part of the fishing the Stonehaven fleet landed most of their catches at Aberdeen, where higher prices were obtained for the early caught fish. The fleet consisted wholly of sailing boats. Earnings varied greatly, ranging from £25 to £190, and averaging about £80. A

feature of the year was the high prices received, the average being 25s. per cran, as against 20s. 4d. in 1912. Quality was very good, and nearly all the catch was kippered and freshed.

The various branches of line fishing are year by year receiving less attention. Only 8 boats were fitted out for the great-line fishing in spring. With the exception of occasional shots landed at week-ends, the great-line catch was as usual landed and sold at Aberdeen. The season was, however, by no means a prosperous one. Earnings were generally poor, ranging from £60 to £150, and averaging about £100 for ten weeks' fishing.

The most important line fishing was that by small lines, which was carried on all the year round, but principally during the summer months, when it was conducted by old men and boys, the younger men being at herring fishing. Small-line fishermen found fish remarkably scarce throughout the whole year, results being especially disappointing in spring and early summer, when catches as low as 8 or 10 haddocks or whitings were taken from 5 miles of lines hauled. For several weeks fishermen did not earn the price of bait used, not to mention wages. Every kind of small-line fish shows a marked decrease when compared with the former year's figures—haddocks, a decrease of 2445 cwts.; codlings, 2694 cwts.; and whitings, 337 cwts. At Stonehaven the motor line boat made only a bare wage, and had it not been for the high prices ruling it is doubtful if the crew would have continued fishing. The principal grounds frequented for small-line fishing were from 4 to 7 miles off Tod Head.

The shell-fisheries of the district were fairly successful, notwithstanding that at Catterline and Shieldhill the crab fishing was to a great extent spoiled by the ravages of conger upon the baited creels. Fishermen resorted to taking the eels with great lines, but such fishing proved unremunerative, while at the same time it made little impression on their numbers. However, after a time they left the crab grounds of their own accord. It is noteworthy that lobsters were more plentiful in the month of December than ever was known before, and crabs during that period had disappeared. All the shell-fish is consigned to English markets. The average return per hundred for lobsters was £6, and for crabs £1.

Most of the fish landed in the district was either sent fresh to Glasgow, or sold by hawkers throughout the surrounding countryside.

Practically no codling or saithe were cured dried, while only 36 barrels of herrings were cured gutted. Consequently the branding done was insignificant.

The sail boats that went to fish at Scarborough were not successful, and four of them returned home in October, while the others proceeded to Grimsby, where better results attended their efforts. Their earnings ranged from £60 to £400, averaging £200. The loss of netting sustained was insignificant.

The net factory at Stonehaven has been further extended, and the number of workers increased accordingly. A very busy year was experienced, and heavy orders have been booked for 1914.

It is gratifying to state that in this district the year 1913 has been free from any serious casualties or loss of life. The loss of fishing gear was also below the average.

There were no technical classes for fishermen held at any of the stations.

The barometers in the district are in good order, and their value is highly appreciated by the fishermen.

JAMES DONALDSON,
Fishery Officer.

FISHERY OFFICE,
ABERDEEN, 14*th January* 1914.

Aberdeen District.

The progress of the fisheries in this district during the year 1913 surpassed that of all its predecessors in respect of the quantity and value of fish landed. The total catch, including herring, white-fish, and the landings of foreign vessels, amounted to 2,685,685 cwts., valued at £1,487,828, an increase of 211,215 cwts. in quantity, and £237,892 in value, when compared with the catch in 1912, which was the previous record year.

In connection with the means of capture many changes have to be recorded, particularly in the case of trawlers. Most of the smaller class of these vessels have been sold to foreign and other ports, and have been replaced by new vessels of a larger and more expensive type fitted up with more modern appliances for facilitating fishing operations, and better able to go farther afield in search of fish. Notwithstanding the decrease in the number of sailing craft, there is an increase in the value of boats and fishing gear to the extent of £52,624. A second-hand yawl of 38 feet of keel was fitted with a " Kelvin " motor in September for the herring fishing on the West Coast, and is the first of the kind belonging to the district. The " North Line Steam Trawling Company " have sold all their vessels, and the company has been wound up. It was the oldest trawling company in Aberdeen.

In reviewing the development of the trawling industry during the year, the total landings, excluding those of foreign vessels, show an increase in the catch of 88,016 cwts., and in value of £128,305, compared with 1912. This substantial increase does not signify more than ordinary success on the part of local vessels, as the catch was considerably augmented throughout the year by the numerous landings made by stranger vessels, and the catching power also increased. The most outstanding features of the year were the exceptionally high prices realised for fish, and the extraordinary shortage in the catch of haddocks, which amounts to 143,100 cwts., although the value is only £8263 less. It is very difficult to give any authentic reason for the remarkable scarcity of haddocks. On the other hand, whitings were very abundant, showing an increase of 25,756 cwts. on the previous year's catch. There is an old saying among fishermen that when whitings are plentiful, haddocks are scarce, and whitings were called the " poverty " fish. It is noteworthy that fewer small plaice were landed during the year than has been the case for several years past. During the year the north-western grounds became less productive, and the North Sea grounds and those between Orkney and Shetland were more extensively fished. The Fladden ground was much frequented in summer, and heavy catches of saithe were landed from that area. The Norwegian coast was also fished more than formerly, but catches fell away considerably after a time, and voyages stopped as non-paying.

The most successful vessels grossed slightly over £7000 for the year, but the net earnings of vessels generally were only fair, owing to the increased working expenses. The average catch per arrival was 156·6 cwts., and average price 12s. 3¾d. per cwt., against 142·7 cwts., and 11s. 4½d. per cwt. in 1912. A new record catch for one day's landings was established on 9th April, viz. 1054 tons, as against the previous record of 932 tons. Twenty trawlers were fitted out for herring trawling in September, and after two or three unsuccessful voyages discontinued operations. About a dozen vessels prosecuted the fishing till the end of November. The most successful vessel grossed over £800, while the average was £550. Most of the catches were landed at Altona, and one vessel that fished there all the season returned home in debt, having been rather unfortunate. The quality of the herring was generally good, although several shots of

very small and inferior fish were landed. The total catch of trawled herrings was 3300 crans, against 1577 in 1912. Prices ruled at from 10s. to 63s. per cran, according to size and selection, and the fish were mostly kippered and tinned. Some herrings of very fine quality were landed by the ordinary trawl net, which shows that with a larger mesh fewer immature fish would be caught (not only of herrings, but of haddocks, whitings, and flat-fish) and thrown overboard, than is the case after each haul by the special small-meshed herring trawl-net.

There was a remarkable increase in the catch of trawl fish landed from Faroe, amounting to 31,079 cwts., valued at £20,871. Fish were more plentiful than they have been for some years past, especially in July, when the catch was almost phenomenal, the supply being more than trebled and the value quadrupled, as compared with the preceding July. The catch consisted chiefly of large haddocks, but Faroe fish are of a rich, soft quality, and not nearly so valuable for market purpose as North Sea haddocks, being difficult to cure smoked.

The Iceland fishing was carried on all the year round by German trawlers, and with remarkable success. These vessels appear to make that fishing pay when the local vessels have to give it up. The advent of March, as usual, saw the commencement of the fishing by the local trawlers, which they continued for about four months. Good catches were invariably secured in spring, when the season was at its height. Owing to the high prices ruling, the season proved very prosperous. Codfish on an average realised 4s. per score more than in the previous year. The total catch exceeded that of 1912 by 95,315 cwts. in quantity, and £44,184 in value.

In August catches began to be landed from the White Sea by German trawlers. The fish landed consisted almost entirely of jumbo haddocks and codlings, and their poorness of quality was very striking, especially in the case of the haddocks, which were very thin, probably from the want of sufficient food. The total catch from that locality amounted to 24,058 cwts., valued at £8672, against 2290 cwts. and £1003 in 1912. It is noteworthy that the catch landed by all foreign vessels exceeds that of 1912 by 96,331 cwts. in quantity, and £55,033 in value.

The steam-line fishing was only moderately successful, stormy weather and the difficulty experienced in getting supplies of herring bait militating greatly against regular fishing. Sixteen trawlers were fitted out for lining in addition to the usual fleet. A feature of the year was the improved catch of ling, caught principally at Rockall and Faroe, while cod and halibut were not so plentiful on most areas frequented. Trawler liners made only fair earnings, and although the regular liners grossed from £4000 to £4800 for their year's work, expenses generally were higher than formerly, and even herring bait proved a heavy item, amounting to over £400 in most cases. The redeeming feature was the high prices received. The record shot realised £582, and was caught at Blackrock on the West Coast of Ireland. Grimsby, Kirkcaldy, and Peterhead liners landed many catches during the season. The total catch shows a decrease of 11,026 cwts. in quantity, but an increase in value of £2333, when contrasted with the figures for 1912. All the motor and sail great-line fish was landed by strangers. The catch by small lines was of very little account.

The herring fishing made an early start in May, and was fairly prosperous for some time, but towards the end of June the catch fell off considerably. In July, however, the landings again improved, the fleet having been greatly augmented by English drifters from Lerwick, and by Peterhead boats. The season's catch was 12,698 crans in excess of 1912. The quality was very good, and the early herrings were above the average in this respect. There was a keen demand for curing and tinning, and prices

ruled extremely high for "green" fish, averaging 35s. 5d. per cran, against 24s. 11d. for the preceding year. The most successful drifter made £1970, and lowest £400, the average being about £650. Sailing boats averaged about £170.

A fair proportion of the white-fish catch was freshed, as usual, and the chief markets were London, Liverpool, Glasgow, and the inland counties of England. Only one small cargo of fresh herrings was "Klondyked" during the year, owing to the high prices prevailing.

The cod, ling, &c., curing industry continues to develop, and several premises have been enlarged for increased business. The artificial process of drying is invariably used to finish off the cure before exporting. The quantity of fish cured dried shows an increase of 120,734 cwts., as compared with the cure in 1912. The number of barrels of herrings cured gutted was also greater, and branding was more in demand. The new "Mattie" brand, favoured by the quality of the early herrings, made a fair start, and with careful administration should give every satisfaction. The "Filling" brand was not taken much advantage of. Most of the season's cured herrings were exported to Germany, almost all in part cargoes to be completed at other stations. The Continental markets were on the whole good, and branded and unbranded herrings realised high prices. The quantity of dried fish exported exceeded that of 1912 by 19,112 cwts., the chief markets being South America, Spain, and the countries on the shores of the Mediterranean.

There were 44 drifters engaged at the English herring fishing, and their earnings varied greatly. Part of the fleet fished from Grimsby and part from Yarmouth. The Yarmouth drifters were the more successful, and the most successful vessel grossed £1805, the average earnings being £830. At Grimsby the most successful vessel made only £810, and the average was £512. The loss of netting sustained is estimated at about £950.

The number of fishing vessels launched was 36, as against 43 in 1912, but their value was only £6900 less. The decrease was all in drifters.

Shipbuilders are fully booked up for 1914, and many orders for drifters have been refused, owing to the impossibility of building them in the specified time.

Coopers were well employed, and their wages were slightly increased during the year. A branch of the "Workers' Union" was formed by the coopers in summer for the better regulating of the coopering trade. The output of barrels exceeded that of 1912 by 29,695. Empty barrels sold at from 3s. 6d. to 6s. each.

The extension of Aberdeen fish market along the Albert Quay is now almost completed, and will be ready for use for the approaching Icelandic season. The building of the new docks at Torry is nearing completion, and they are expected to be opened soon.

The fuel question in connection with the steam-fishing industry has engaged the attention of owners, the price of coal having risen considerably during the year. A trawler is now being fitted with a superheating apparatus for a local owner, and this will no doubt come into common use in the future. Almost everything belonging to the outfit of trawlers and liners has gone up in price lately, so that a higher degree of efficiency is required among fishermen before expenses can be cleared. At the end of summer deck hands and cooks made application for an increase of wages and better conditions. For a time it seemed as if trouble was brewing, but a settlement satisfactory to all parties was arrived at.

No special technical classes have been held for fishermen at Aberdeen. Fishermen who intend to sit for examination for the Board of Trade certificates as second fishermen, mates, and skippers are coached for their examination at the Aberdeen School of Navigation, and a grant of £150

per annum is given by the Aberdeen District Technical Committee to that School. The Governors of Robert Gordon's Technical College have decided to erect a Technical School for seamen and fishermen, and a site has been given free by the Aberdeen Harbour Commissioners for that purpose.

JAMES DONALDSON,
Fishery Officer.

FISHERY OFFICE,
ABERDEEN, 15*th January* 1914.

Peterhead District.

The year 1913 has been a remarkable one, and one which will be long remembered by almost all connected with the fishing industry. It has had no parallel as regards its success ; and it may be said that a wave of prosperity has passed over the fishing community. This was due to the fact that while the home herring fishing was exceptionally successful, the season at East Anglia exceeded all previous years. It was thought that the records of 1912 would not be readily broken, but as regards quantity of fish and profitable trading they have been considerably surpassed. With the exception of two, all the curers belonging to the district were engaged either at Yarmouth or Lowestoft, some of the larger firms operating at both, and all have reaped an excellent harvest. In fact, the home and English herring fishings have been a source of great prosperity to all connected with the fishing industry, with the result that an atmosphere of confidence prevails, and the outlook for the year 1914 is most promising.

As an outcome of the year's successs the means of capture are likely to be considerably increased. The fleet of steam drifters registered as belonging to the district shows an increase of 4 over 1912, but an additional 15 or 16 second-hand vessels, and 2 or 3 new ones, have been secured by fishermen and fish-salesmen, and will shortly be added to the register. Others are prepared to give orders for new vessels or to purchase second-hand ones, but the latter cannot be got at prices which prospective buyers are prepared to pay, and owing to the boat-builders being unable to cope with the urgent demands the former will have to be delayed for a year at least.

The year's phenomenal success apparently makes it quite obvious that the fishermen are keenly alive to the fact that progress can only be looked for by discarding old methods and adopting the newest and most up-to-date means of capture. The fishermen now evince a preference for wooden vessels of a size rather less than the iron and steel drifters which they showed a preference for some years ago. These wooden vessels are from £600 to £1000 cheaper, and the working expenses considerably less. The year's success has also to a large extent made fishermen more independent of extraneous aid for the development of their industry.

In consequence of the prosperity attending those connected with steam drifters and the herring fishery, only a very few fishermen, and those the oldest, pay any attention to white-fishing. Therefore, while other districts are going in for motor power in connection with the haddock and codling fishing, such auxiliary aid is entirely neglected in this district. True, there is one motor boat registered at the port of Peterhead, but the fishermen who own it live in and fish out of Aberdeen.

The classes in navigation for second hands, masters, and extra masters on board steam drifters, which have been so successful during the past few years, were well attended during 1913. The Burgh School Board

in addition to these have opened engineering classes for drivers and firemen, and the opportunities offered by the Board have been well taken advantage of. It is considered very desirable and necessary that all those acting as engineers should be certificated under the Board of Trade, and owners of steam drifters are beginning to realise this.

The summer herring fishing began about the middle of May, but in contradistinction to 1912 no close time was observed or even mooted. At the outset the only difficulty experienced arose out of the agitation of the hired men for better terms. The difficulty was quickly surmounted, and the fishing was soon in full swing. The results from the first were satisfactory, especially for the steam drifters, which were able to proceed 50 to 70 miles off in a south-east by east direction, where the grounds proved to be very prolific. The quality of the herrings found on these grounds in previous years was generally very inferior, but the fish caught during the season of 1913 were superior to anything landed in the last few years.

At the beginning of the season the weather was unfavourable for sail boats proceeding to the distant grounds, but when about the middle of July shoals of herrings made their appearance on the inshore grounds conditions were entirely changed in favour of sail boats. The shoals, too, contrary to what happened in previous years, remained on these grounds for a protracted period, a fact which reminded the fishermen of the days when they used the old baulk rope nets. The season was remarkable for heavy takes both on the offshore and inshore grounds. Shots of 100 up to 180 crans were not uncommon, such shots being conspicuous by their absence during the previous three or four years.

While other leading ports were struggling on with meagre success, Peterhead forged steadily ahead, with the result that numerous stranger boats were attracted to the port, and the number of craft increased from 350 to 420. About 50 English drifters came from Shetland about the first week of July, and so fortunate were they that they remained for the rest of the season. The fleet for the whole season consisted on an average of 400 craft, 185 steam drifters, 212 sail boats, and 3 motor boats. The earnings of steam drifters ranged from £900 to £2100, sail boats £350 to £1000, and motor boats £500 to £1100.

A feature of the year's fishing was the exceptionally high prices which were paid to fishermen. In the beginning of the season the average price per cran was 20s., but later on prices rose to 40s. and as high as 49s., the average price for the season being 32s. 10d., as against 23s. for 1912.

The curing industry has never before been in such a sound condition, nor have its prospects ever been so hopeful. It is, however, impossible to foresee, and unsafe to prophesy, what another year may bring forth. As the catching power increases the markets throughout the interior of Russia and Germany are apparently opening up in proportion. As a result of the handsome profits realised by curers, especially in East Anglia, 12 or 13 additional curing establishments are to be opened, most of them by fishermen who have been successful in their operations with steam drifters.

The line-fishing industry, once of very considerable dimensions, has been decadent for a good many years, and although it is not likely to die out altogether, it gets less year by year. The great scarcity of haddocks and other white fish along the coast, with the success of the herring fishing, caused a still further decline during the year under review.

The English herring fishing has in recent years attained extraordinary magnitude, and the season of 1913 has, as already been said, beaten all previous records. The number of craft which proceeded to the English herring fishing was 128, all steam drifters, except 4 sail boats. The earn-

ings of the steamers ranged from £500 to £1400, and those of the sail boats from £250 to £350, both apparently higher than the previous year. Owing to the weight of fish and frequent fouling on the limited fishing area, the loss of netting amounted to between £7000 and £8000.

As already stated, the success which attended the home herring fishing attracted a larger number of stranger craft to the port, and during the busiest part of the season every available foot of space in the harbours was required. Indeed, during several week-ends accommodation could not be found for all the vessels and many had to run to Aberdeen. The Harbour Trustees are therefore faced with the problem of providing extra accommodation.

The success of the home and English herring fishings created so great a demand for barrels that the stocks were entirely cleared out, and the replenishing of the stores will provide ample employment for barrel-makers throughout the year 1914. To cope with the great demand for barrels, machinery for the jointing of staves and the dressing of the ends was considerably increased towards the end of the year.

WALTER DUFF,
Fishery Officer.

FISHERY OFFICE,
PETERHEAD, 9*th January* 1914.

Fraserburgh District.

The most important features of the fishing industry, during the year under review, were the high prices paid for herrings throughout the summer herring fishing, the increase of steam and motor vessels, the decrease of first-class sail boats, and the success which attended all those who went to the English herring fishing.

Compared with the former year there are 21 fewer sail boats in the district, with a corresponding decrease in the value of sail boats and also of the fishing gear used by them. On the other hand, there is an increase of 21 steam drifters and 7 motor boats, so that after allowing for depreciation, the total value of fishing vessels of all kinds, and their fishing gear, shows an increase of about £50,000.

The summer herring fishing, which is the principal industry of the district, began on 14th May, and was carried on until the 13th September. Considering the long period over which operations extended, the quantity landed was disappointing. July, which is generally one of the most prolific months of the season, produced only about one-half of what was landed in the corresponding month of the previous season. With such a shortage not only here, but at other ports, the demand became keen, and prices moved steadily upwards. All previous records were exceeded. The price rose to 51s. per cran on 18th July. On 25th August the crew of the sail boat *Majestic* shot about 15 miles off St. Combs; it took 3 boats and their crews to haul and bring the catch to port on the following day, and the fleet of 75 nets produced 364 crans, valued at £826, a record shot for both quantity and value. Other crews who were fishing in close proximity had very meagre catches. This was a peculiar feature of the fishing throughout the season, an occasional crew, or a few crews, securing big shots, while the bulk of the fleet had either missed the fish entirely, or only caught a few crans. Fishermen learned about the middle of the season that Dutch fishermen were getting good catches on the distant fishing grounds by using long buoy ropes, and a rush was made for longer buoy

ropes, 6 to 8 fathoms in length, a considerable number of crews fitting the whole, or a large part, of their fleet of nets with these. Some fishermen were of opinion that the long buoy ropes were an improvement in fine weather, others were doubtful, but towards the end of the season nearly all had reverted to the ordinary buoy rope, 3 fathoms in length. The best-fished vessel, a steam drifter, grossed fully £1800, while a few sail boats were under £100. The average price of herrings landed by steam drifters was 36s. 1d. per cran, by motor boats 34s. 7d., by sail boats 33s. 7d., the average price for the whole catch being 35s. 7d. The value of herrings landed was £81,000 more than the previous year, although the catch was close upon 15,000 crans less.

The most productive fishing grounds have been generally 20 to 60 miles north-east, and north-north-east from Kinnaird, but during July, when fish were scarce on these grounds, steamers brought supplies from 70 to 80 miles east-south-east.

The cured market was buoyant throughout the season, but owing to the high prices paid for the fresh article, the curers' margin of profit was small. The quality of the fish from the middle of June onwards was very good, and very few spent fish were landed.

Exports went on slowly but steadily during the season, and a considerable quantity was sent coastwise to Leith, and by rail to Aberdeen and Glasgow. At the end of September 9000 barrels remained on hand.

A large quantity of mackerel was caught during the herring-fishing season, which sold at a very low price. Mackerel caught at this season are apparently not suitable for splitting and curing with salt, and the whole catch was therefore "freshed" or tinned.

With the exception of ling, eels, and dabs, which show a small increase, all other kinds of line-caught fish show a falling off, especially cod, haddocks, and whiting. During most of the year fish appeared to be scarcer than usual on the ordinary fishing grounds. It is hoped that by the introduction of motors into line-fishing boats a new impetus may be given to this branch of the industry.

There is only one factory which deals in bye-products. The company who own the factory have dealt with the whole of the fish offal produced in the district. After the oil is extracted, the residue is artificially dried and sold as manure.

The local School Boards still continue evening classes for teaching navigation to fishermen. At an examination in March, 6 fishermen got certificates as extra masters, 23 as skippers, and 10 as second hands. In connection with the fishing industry, evening classes are also held in marine engineering, marine motors, cookery, coopering, and fish-curing; and, in addition, a course of lectures on fishes, their food and habits, has recently been commenced.

The number of whole and half barrels made in the district shows a large increase. Several fish-curers introduced into their cooperages machinery for dressing staves and ends. Coopers were fully employed throughout the year.

Thirty-two cargoes of fishery stock were sent to England, and a large number of barrels were also sent to that quarter by rail, 15 cargoes were sent to Shetland, 6 to Orkney, 6 to Stornoway, and 9 cargoes of tinned herrings were sent to London; while 31 cargoes of staves and hoops and 17 cargoes of fishery salt were imported. Three of the latter came from Torreviega. The fishery salt manufactured in that quarter is apparently very suitable for herring-curing, and gave satisfaction to all who used it.

Boat-builders were well employed. Towards the end of the year there was a great demand for wooden steam drifters, and the firms who build this class of vessel are fully booked up for next year, while several orders

have had to be refused. Meantime, there is a scarcity of practical employees in this trade which prevents full advantage being taken of the demand.

Eighty-five steam drifters, 14 of the large-sized motor boats, and 14 sail boats were employed at the English herring fishing. So far as local fishermen were concerned, the fishing only lasted seven or eight weeks, and during that short period a record fishing was landed. The previous year was a prosperous one for all concerned in the herring-fishing industry in that quarter, but the year under review is believed to be the most prosperous which fishermen and fish-curers have ever had, especially if the English is taken in conjunction with the Scottish fishing. During the English fishing a considerable quantity of gear was lost and damaged through weight of fish and fouling. Otherwise the loss of and damage to local boats and their gear was normal.

GEO. CORMACK,
Fishery Officer.

FISHERY OFFICE,
FRASERBURGH, *7th January* 1914.

Banff District.

The outstanding features of the year under review were the falling off in all kinds of fishing within the district, and the abnormally high prices prevailing. The herring fishing was the poorest for a number of years, and line fishing showed a considerable decrease, principally in haddocks, the total catch of which was less than half that of the preceding year. Various causes are assigned for the shortage, the principal being the prevalence of winds from the north and north-east, which made it difficult for sail boats to reach the distant fishing grounds, and scarcity of fish on the inshore grounds. The increase in steam drifters also militates against line fishing, as year by year a greater number of fishermen leave it and follow herring fishing all the year round. Notwithstanding the small catch, fishermen had a remarkably prosperous year, as unusually high prices for green fish more than made up for the shortcoming in quantity. Unfortunately, what meant their success meant the opposite for curers, the high prices which they paid making it almost impossible for the latter to have much, if any, balance on the right side. Following the poor home fishing came a very successful English fishing, which meant hard work and splendid earnings for all fish workers, as well as the clearing out of all stocks of barrels at remunerative prices, whereby ample employment for coopers during the winter is assured. Steam drifters are steadily making headway and sail boats as steadily declining. A number of the latter have been sold, and several old, useless ones broken up, so that although 7 steamers were added to the fleet the number of vessels is slightly reduced. Motor power for small boats is still popular with the Whitehills fishermen, and the success of those already in operation is likely to lead to a further increase in that type of boat.

The only herrings landed during the winter were a few crans brought in by boats returning from the West Coast.

The summer herring fishing, which began early in May and continued until the first week in September, was light throughout. June and August were the most successful months, May and July contributing only a small proportion of the catch. In the beginning of the season quality was inferior, but later on the herrings were of fair size and excellent quality. The fishing was by no means general, and may be described as "spotty,"

some boats having good shots, while others working in the same vicinity had nothing. On no occasion was the supply equal to the demand, with the result that prices were exceptionally high, the average for the season being 30s. 3d. per cran, against 23s. 3d. in 1912. Although the catch was about 1700 crans below that of the previous year, the value was greater. The high prices certainly benefited fishermen, but acted adversely on curers. Kippering, generally a considerable source of income in this district, did not pay, so had to be given up earlier than usual, and curing for exportation was by no means profitable. Fresh and kippered herrings go to Manchester, Liverpool, and Birmingham, and those cured for exportation went mostly by rail to Peterhead, Aberdeen, and Leith, *en route* to Stettin and Danzig.

Line fishing shows a considerable falling off, largely in haddocks, but prices being exceptionally high to some extent helped the shortcoming in quantity.

Unsettled stormy weather, particularly towards the end of the year, frequently prevented the boats from getting far enough off, while fish were very scarce on the inshore grounds, and it must be borne in mind that the number of boats carrying on this fishing is decreasing year by year. The haddocks were mostly large-sized fish of superior quality, the proportion of medium and small being comparatively small. The greater part of them was sent off by curers, part smoked, and the rest fresh, chiefly to Glasgow, but a good many were disposed of locally by women.

Cod-net fishing was prosecuted by about the usual number of boats, but with less success. The catch was about one-third smaller than last year's, but good prices made the value almost equal. The Whitehills fishermen did very well, fishing with nets for soles and plaice near the shore off the village. The catch and value were about double those of 1912, which made a considerable addition to the earnings of these men.

Shell-fish fishing was carried on at Gardenstown, Macduff, and Whitehills with poor success. The varieties are crabs and whelks, but the latter are of little account, being small, scarce, and not much sought after.

There was an increase in the number of steamers at the English fishing, and a decrease at the Irish fishing, but very few sailers went to the former, and none to the latter. The steamers' earnings in England were from £500 to £800, with in a few cases £1000, and sailers' £150 to £300. In Ireland, steamers made from £200 to £450.

Boatbuilders were busy during the year, building in all 34 fishing vessels (of which 17 were steamers). Twenty-four were for the district, 9 for other districts, and 1 for England. For the coming year prospects are good, as builders' hands are full, and likely to be so, constructing steamers.

During the year 2 steam drifters belonging to Banff were lost in connection with the English fishing. One was run down by a steamer and sank, and the other, just after leaving Lowestoft for home, sprang a leak and foundered. Fortunately, in both cases, the crew was saved. There was no loss of life in connection with the fisheries in the district, and the damage to gear in Scottish waters was comparatively light. In England there was, as usual, a good deal of loss of and damage to netting.

Navigation classes for fishermen were carried on at two centres in the district in the beginning of the year, but were not much taken advantage of. In one case 11 men presented themselves for examination, of whom 7 passed as skippers, 2 as second hands, and 2 failed; and in the other—a smaller class where the interest was not kept up—2 passed as skippers, and 3 as second hands. This year an attempt was made to form a navigation class at Macduff, but, owing to the small number who came forward, it was given up. Quite recently a class of 38 to 40 young fisher lads was started at

Whitehills, at which, in addition to navigation, several are getting instruction in cooking. It is to be hoped that the interest in this class will be sustained, but so many of the fishermen passed the Board of Trade examination recently, that comparatively little interest will be taken in these classes until the younger fishermen are old enough to come forward for examination.

The fishery barometers are in good order, and fairly well attended to.

JAS. FARQUHARSON,
Fishery Officer.

FISHERY OFFICE,
MACDUFF, 6*th January* 1914.

Buckie District.

The principal source of income of the majority of the fishermen of this district is now herring fishing, which they prosecute throughout the whole year from the principal fishing centres on the Scottish, English, and Irish coasts, and the year under review may be considered as one of great prosperity for them, and, in fact, to all concerned in the industry.

The value of the fish returned as landed in the district represents only a small fraction of the earnings of the fishermen. It is estimated that the aggregate earnings of the crews who followed the herring fishing throughout the year exceeded half a million pounds sterling.

The most noteworthy features in the means of capture returns are the continued increase in steam drifters, and a corresponding decrease in sail boats,—19 steam drifters having been during the year added to the fleet, which now numbers 276 vessels of 7270 tons, while, on the other hand, 14 first-class boats were cancelled from the register. The number of steam drifters now registered in the district exceeds the first-class sailing boats for the first time. The means of capture returns, which include vessels, and all fishing material, show an increase of £20,564 in excess of last year.

The winter herring fishing beginning in January was taken part in by 90 steam drifters, who fished principally on the West Coast, making Stornoway their headquarters. The season proved most successful for them, their earnings ranging from £400 to £800, with an average of £500 per vessel.

At the beginning of the summer fishing, in May, the whole fleet of steam, motor, and sail boats fitted out and left home for the West Coast, Shetland, Orkney, and the East Coast from Wick to Aberdeen, coming home occasionally to refit, until the close of the season in September. The results of the season were most gratifying to all concerned, as high prices were realised, owing to the partial failure of the fishing. Individual earnings ranged from £800 to £1400 for steamers, £400 to £800 for motors, and £350 to £500 for sail boats, or an average of £1000, £600, and £450 respectively. During that period operations at home were, until the last week in June, confined to a few sail boats which fished in local waters, after which date the bulk of the herrings were landed by steamers coming home to refit at week-ends. The season ended with a total catch of 5401 crans, against 11,692 crans in 1912.

Two hundred and seventy-six steam drifters, 9 motor, and 60 sail boats comprised the fleet which proceeded to the English herring fishing from this district. Their success on that coast taken in conjunction with

their earnings on the Scottish coast made the year one of the most prosperous drift-net fishermen have ever had. The most successful steamer grossed £1400, and the lowest £750, the average earnings being £800, £450, and £280 respectively, The loss of fishing gear was considerable, being estimated at £35 per boat.

The small-line or haddock fishing which is prosecuted from all the creeks in the district, and affords employment to a considerable number of the older class of fishermen, was fairly prosperous. From 40 to 50 small and 6 large boats were employed during the spring and autumn months with fairly good results, although the returns show a slight decrease compared with those of the previous year. The fish were of excellent quality, and were bought principally for the Glasgow markets at prices remunerative to fishermen.

The cod-net fishing was taken part in by 1 steamer and 83 sail boats during the first three months of the year, and was very successful. The returns show an increase of 5162 cwt. in quantity and £3188 in value compared with those of 1912. Two local fishcurers conducted curing operations, and 2456 cwt. were dispatched by them in a wet state to other districts to be dried, and 571 barrels cured in pickle for the London markets.

Auxiliary motor power was installed in 4 first-class boats at the close of the summer herring fishing, 2 of the engines being "Gardner," and 2 "Kelvin," of 48 and 30 horse-power respectively. In addition, 2 small boats, intended principally for the West Coast loch fishing and line fishing at home, were specially built for the reception of motor engines.

Boat-building was fairly active, 8 steam drifters and 1 sail boat being built and launched during the year. The prospects for 1914 are also good, the six building yards in the district all having sufficient work on hand to keep them actively employed for a considerable period.

The teaching of navigation is being carried on during the winter months at all the creeks of the district, and the young fishermen take full advantage of the classes.

James Stewart,
Fishery Officer.

Fishery Office,
Buckie, 20*th January* 1914.

Findhorn District.

The quantity and value of fish landed in the district during the year under review compare unfavourably with the returns for the previous year, the shortcoming amounting to 45,749 cwts. and £8496 respectively, referable chiefly to herrings, cod, and haddocks. Fortunately, however, only a small proportion of the district fishermen are entirely dependent on the local fisheries, and for the large majority who prosecute herring fishing at the chief centres around the coasts of Scotland, England, and Ireland, the year was an exceedingly prosperous one. Although in the beginning of the year a number of steam drifters prosecuted operations for a short period on the Irish coast with poor results, an excellent fishing was obtained on the West Coast of Scotland, and a number of the more fortunate crews had gross earnings ranging from £500 to £1000. At the summer fishing the exceptionally high prices prevailing for fresh herrings compensated the fishermen for the shortcoming in the catch, and the gross earnings of steam drifters ranged from £600 to £1400, and of motor and sail boats from £250 to

£800. The English fishing also proved most remunerative, steam drifters earning from £400 to £1300, motor boats from £300 to £500, and sail boats from £200 to £400.

The principal feature in connection with the means of capture was the increased interest shown by the fishermen in motor propulsion. Four boats, ranging from 33 to 40 feet keel, were specially built for the installation of motor engines, while a second-hand sail boat of similar size was also fitted, the engines installed being three "Avance" and two "Nat." The number of steam drifters was increased by three, while the number of first-class sail boats shows a decrease of twelve.

At Inverness the herring and sprat fishing, which is usually prosecuted during the first two and last three months of the year, proved a failure, the landings amounting to only 3159 cwts., valued at £1128, against 28,564 cwts., valued at £5303 in the previous year. All the catch was disposed of in a fresh state, a considerable proportion locally.

The cod net fishing was prosecuted from the latter end of January to the middle of April by a fleet of 24 steam and 45 sailing vessels, chiefly from Lossiemouth. The results were fair, although the quantity and value were 8239 cwts. and £998 respectively less than during the previous season. Prices fluctuated considerably during the season, ranging from 13s. to 75s. per score. Two firms conducted curing operations and dealt with 4500 cwts. live weight, but the great bulk of the catch was dispatched in a fresh state to the Glasgow and London markets.

During the summer herring fishing landings were practically confined to boats arriving home for the week-ends, and the catch amounted to only 2736 crans, against 4029 crans for the previous season. Exceptionally high prices prevailed, the average per cran being 33s 7d., against 24s. in 1912, so that the cash value showed only a slight decrease. For local curers the season was unprofitable, as the herrings were kept on hand for a considerable time and sold when prices had declined.

Small-line fishing yielded poor results throughout the year. The number of crews employed ranged from 30 to 60, composed chiefly of the older fishermen. Haddocks were exceptionally scarce, the catch being less than half that of the previous year, and this species shows a decrease of 8164 cwts. in quantity and £3548 in value. As a natural result of the scarcity prices were unusually high, occasionally touching 30s. per cwt., while the average for the year was 5s. per cwt. above that obtained in 1912.

The boat-building trade was not particularly brisk. Four steam drifters and a motor boat were built at Inverness, two of the former being for Londonderry and one for Buckie, while at Lossiemouth five motor and two sail boats were constructed. For the current year prospects are exceptionally good, the orders placed meantime all being for steam vessels. Coopers were steadily employed throughout the year, and the heavy English fishing absorbed all stocks remaining over at the close of the summer fishing.

Unfortunately the loss of life was unusually heavy. In February a Burghead steam drifter was lost off Buncrana, and the crew of nine men drowned. In March a Lossiemouth fisherman was drowned while engaged in the cod fishing. Two steam drifters were wrecked on the West Coast during the progress of the winter fishing, but were afterwards salved and repaired, while two first-class sail boats were also wrecked during the year. In local waters considerable damage to cod netting was sustained, while at the English fishing the loss of netting was estimated at £50 per boat.

The teaching of navigation to fishermen has been carried on at four centres in the district during the last few years and has been largely taken advantage of by those anxious to obtain certificates as skippers and second hands. Navigation is also taught at evening continuation classes to young

lads who intend following a sea-faring life, and at Lossiemouth an engineering class is also being conducted with considerable success.

The fishery barometers are in good order.

WILLIAM SINCLAIR,
Fishery Officer.

FISHERY OFFICE,
LOSSIEMOUTH, *9th January* 1914.

Cromarty District.

The majority of the district fishermen were employed during the greater part of the year in drift-net fishing at the chief herring-fishing centres on the West and East Coasts. Fish landed in the district were chiefly caught by means of small and hand lines. The earnings derived from herring fishing represent fully three-fourths of the total earnings for the year. Although the local fishing grounds were less productive than in the preceding year, and earnings from that source of smaller amount, still the deficiency was more than covered by the greater success of the men at other parts of the coast.

Close on 400 men were absent at herring fishing for a considerable period of the year. Included in that number are the crews of 18 boats belonging to the district. The remainder were employed as hired hands on boats registered at other East Coast ports. The district crews fished for the most part at Castlebay and Fraserburgh. A number of the hired men took part in the fishing at Lowestoft and Yarmouth.

Fewer district crews went to Castlebay than on former occasions, but there 6 boats averaged over £300 each. Eighteen boats averaged £340 on the Aberdeenshire coast, and 2 averaged £380 at Lowestoft and Yarmouth. Three steam drifters, belonging to other districts, but manned entirely by Avoch fishermen, averaged £1400 at Fraserburgh and £750 on the coast of England.

In connection with the different herring fishings the crews of boats and hired men grossed in the aggregate £25,700. That amount is £4700 in excess of the highest earnings of any of the past six years. In view of the decline of the local line fishing this satisfactory result was all the more gratifying. The increase was derived in equal proportion from the successful seasons at Fraserburgh and on the coast of England.

The fisher girls who left home as gutters and packers of herrings were also well remunerated. Between 230 and 240 were employed from May till September, and the majority till the close of the English season in November. All are agreed that the season, on the whole, was one of the best ever experienced.

There was a slight development in cod-net fishing, the fleet, which stood at 3 boats in 1912, being increased to 6 in 1913. It cannot be said that the work was profitable. Cod appeared to be scarce during the spring months, and often the catches were of the most meagre description. The boats employed were of the second class, similar to those used by the Avoch men at sprat fishing.

The fleet of first-class boats, which has been dwindling during the past few years, shows a further reduction of 3 vessels. Two of these were sold to Orkney district. One was acquired from Moray Firth owners and added to the list, and 2 old boats were discarded as unseaworthy, and were not replaced by others. Second- and third-class boats also tend to decrease.

Emigration to Canada and other British Colonies, though not on such a large scale as in the preceding year, again claimed half a score of men.

Others were attracted to service in the Mercantile Marine. These latter were mostly Cromarty young men, ranging in age from sixteen to twenty-three years. Comparatively few of the youths in this town now seem disposed to follow their fathers in fishery pursuits, the majority preferring occupations other than fishing. Though no steam drifters or motor boats are owned in the district, yet 3 of the former, registered elsewhere, were manned entirely by district crews. Fishermen have not yet adopted motor power as an auxiliary.

At the close of the summer herring fishing fully 40 Avoch and 2 Cromarty crews fitted out for sprat and small herring fishing. Operations were conducted in the Inverness and Beauly Firths, and for a short time in the Cromarty Firth. Though the waters were searched most assiduously, no dense shoals were struck at any period. At the close of the season in December it was found that the average earnings of crews were little over a third of the returns of the preceding year. Inverness was, as usual, the port of landing.

Numerous factors contributed to the decline in the small-line fishery. Haddocks were scarcer than during the preceding season, weather conditions were not so favourable, and fewer boats were employed. This latter circumstance was due to the fact that a number of men wrought as navvies at the Admiralty construction works on the Cromarty Sutors for five months of the year. Arrivals were 2138 fewer than in 1912, and the average catch was 2·4 cwt. in comparison with 2·6 cwt. in 1912. The maximum number of boats at work was 68 against 76 in 1912. One noticeable feature was the predominance of large and medium haddocks over the small selection. A larger proportion of the catch than formerly was sold for use in the district. The presence of H.M. ships in these waters for a considerable period explains that, as also the increase in the average price realised. Small consignments were sent to Inverness and Aberdeen at certain seasons. The bait used was mussels and "buckies," both of which were procured free of cost from the adjacent beds. The catch of flat fish was small, but up to the previous year's standard.

The gathering of whelks received attention during the spring months, but the revenue from this occupation was not of large amount. The produce was sent to London market. Crabs and lobsters are not plentiful in this district, and the location and capture are confined to one small section.

No provision was made for the teaching of technical subjects to adult fishermen, and there was no demand for such, but the various School Boards in the district instituted evening continuation classes where fisher youths were taught navigation and cookery. These classes were well attended, and the boys exhibited great interest in their work. A knowledge of cookery is being acquired for the purpose of starting a seafaring life as cooks on board steam drifters and other vessels.

There was a total immunity from loss of life, and the damage to boats and gear was less than the average amount.

The 5 fishery barometers remaining in the district are all in good order, and continue to give satisfaction to fishermen at the various creeks.

ALEX. E. M'KENZIE,
Fishery Officer.

FISHERY OFFICE,
CROMARTY, 5*th January* 1914.

Helmsdale District.

The results of the fisheries in the year 1913 were poor, and show, when compared with those obtained in the preceding year, a marked decrease in both quantity and value. Yearly the fishing population of the villages of this district becomes more dependent on the herring fishing, and fortunately both the fishermen and the women workers experienced, in 1913, gratifying success at the fishings in which they took part.

For a fortnight in February haddocks were very plentiful on the fishing grounds off Helmsdale. During that period 21 small yawls belonging to Helmsdale landed 1618 cwts. of haddocks and codlings, but chiefly haddocks, valued at £640. The yawls were manned by 74 men, so that the average earnings of the fishermen worked out at £8 13s. for the fortnight's work. That was, however, the only bright incident connected with the haddock fishing. These fish were at all times throughout the remainder of the year remarkably scarce on the fishing grounds, except in Dunbeath Bay, where, in October and November, some good catches were obtained by the Dunbeath, and occasionally the Helmsdale, crews.

From March on to the end of the year the "ripper" fishing was irregularly prosecuted by a few crews from Helmsdale and Dunbeath. The results, however, were very disappointing, the individual catches seldom exceeding 1½ cwt. codlings.

In the spring months the fishermen of Golspie succeeded in securing fairly satisfactory earnings by combining cod-net with small-line fishing.

The shell-fish fisheries were carried on as usual. When compared with the results obtained in the preceding year increases are shown in lobsters and in unclassified shell-fish, and decreases in mussels and crabs. The total value shows an increase of £83 over that of 1912.

The line "Gardner" motor yawl, belonging to Dunbeath, mentioned in last year's Annual Report, was employed in 1913 from 1st January to 4th April at small-line and cod net fishing, and from 18th September to 31st December at small-line fishing. For these periods the gross earnings (after deducting £7, the value of the oil consumed) amounted to £250. The boat cost £190, was manned by 4 men, and one-fifth of the gross earnings was allowed for the boat's share. The engine has given no trouble, and continues to give great satisfaction to the owners of the boat.

At the close of the summer herring fishing 2 Dunbeath crews each hired a motor line boat from Wick owners. These boats were also employed at small-line fishing during the last quarter of the year. Their gross earnings for that period (without deducting cost of running the engine) amounted to £60 and £105 respectively.

In the closing days of the year, and too late to be entered in the returns of fishing boats for 1913, there was installed into one of the Brora haddock yawls a 6 horse-power "Kelvin" motor engine. This installation cost £70. No doubt the results of this experiment will be watched with interest by the fishermen of Brora and the neighbouring villages.

The returns of "means of capture" show, when compared with those of 1912, no change of an important nature. The decreases of 6 and 78 respectively in the number and tonnage of fishing boats, as shown in Appendix A.—No. 2, were due to a number of worn-out sailing boats having been cancelled during the year.

A large number (occasionally as many as 50) of the Embo fishermen were, for a considerable portion of the year, employed as labourers at the Admiralty Works, Cromarty, and, after the month of March, the fishing was almost entirely neglected at that creek.

At the close of the summer herring fishing, owing to the only firm of fishcurers here having been left with a large stock of empty barrels, the coopers of the district were all thrown idle, and were not engaged to make barrels until the end of November, when the majority of them started work here. Some of them left home and found barrel-making jobs in other places.

The women who went from the district as gutters and packers to the summer herring fishing numbered 255, and to the English fishing, 180. Their average earnings (including arles) at the summer fishing amounted to £39 per crew of 3 women, and at the English fishing to £42 per crew. It may be interesting here to state that the total earnings of these women for the 2 fishings (including cost of fares to the curing stations, and lodgings provided by their employers) amounted in 1913 to £7149, or £40 more than the value of all the fish returned for the district in that year.

The men who went as hired hands to the summer herring fishings had earnings which varied from £16 to £110, the average being £94 for those with nets, and £45 for those without nets. At the English fishing the average earnings were £45 for those with nets, and £28 for those without nets.

The average gross earnings of the 9 steam drifters belonging to this district were £1052 at the summer herring fishing, and £559 at the English fishing. Nine sailing boats, the same number as in the previous year, averaged £371 at the summer fishing—the only fishing at which they were employed.

To provide for fishermen desirous of obtaining certificates of competency as ex-skippers, skippers, and second hands of fishing vessels, the School Boards of Helmsdale and Embo have each included navigation in the list of subjects to be taught at their evening continuation classes. The schemes of work have been arranged so as to meet the requirements of the examination of candidates for these certificates. An examination held in April resulted in 7 of the fishermen passing successfully for skippers, and 5 for second hands. Previous to 1913 skipper's certificates had been obtained by 8 of the fishermen; so that, up to the end of 1913, there are belonging to this district 15 passed skippers, and 5 passed second hands. Of these, 4 skippers and 3 second hands belong to Embo, 5 skippers and 2 second hands to Helmsdale, and 6 skippers to Dunbeath. At Helmsdale 20, and at Embo 16 fishermen enrolled themselves for the session 1913–14. Of these, at the end of the year, 28 were attending the classes regularly and taking a keen interest in the lessons.

The fishery barometer at Dunbeath is in good order.

ALEXANDER WOOD.
Fishery Officer.

FISHERY OFFICE,
HELMSDALE, *8th January* 1914.

Lybster District.

It cannot be said that the status of this district has in any respect improved since reported upon a year ago. Little change in the means of capture has been effected. The number of fishermen has slightly decreased, and the general results of the year's work show a decline when compared with those of the previous year.

Of recent years the winter herring fishing on the coast grounds has been

extremely disappointing, so much so, that fishermen have ceased to make any special arrangements for its prosecution. During most of the month of January, however, there was a continuation of strong south-east gales, which made any attempt at herring fishing impossible. A good many years have elapsed since the winter herring fishing was so entirely blank as in the year under review.

From early in June to the first week in September the summer herring fishing was prosecuted in most favourable weather upon the inshore grounds. At different periods, from 7 to 11 crews were employed. The craft made use of were generally from 30 to 40 feet of keel, and unprovided with steam-hauling power. Operations were conducted as near to the land as they could with safety approach, and the better to accomplish this, no bush ropes were used in connection with the nets, which were mounted on the old system, with back ropes and cork floats on the top, and stones on the bottom for the purpose of sinking them in the water. The total catch for the season was 563 crans, being more than twice the quantity for the previous year. On the whole, the fish were of very good quality, and realised from 25s. to 33s. per cran. A total of £791 was realised, which gave an average price of 27s. 9d. per cran, as compared with 21s. 4d. for 1912.

Under present conditions there is not much prospect of any revival of the herring fishing taking place in this district. The bulk of the fishermen do not earn a sufficient amount of money to enable them to improve their position. Those of the crews who are fairly well equipped with boats and nets prefer to prosecute the herring fishing from Wick, the most productive grounds being much more easily reached from that port than from Lybster. There is also a deeper harbour there than at Lybster, and at the larger port there is more competition for the fish, and better facilities for their disposal and dispatch when cured, and consequently the proceeds of their labour can be disposed of to better advantage.

Line fishing was not nearly so successfully prosecuted as it was during the previous year, the quantity and value of the catch being more than 50 per cent. less than in 1912. Both in the first and last quarters of the year unfavourable weather prevailed, strong south and south-east gales blowing almost incessantly, which to some extent accounted for the deficiency in the catch. Besides that, however, fish were not so abundant upon the grounds usually frequented by fishermen, as during the two preceding years. Most of the catch was forwarded to Wick for sale, or sent direct to the southern markets, a portion being disposed of for consumption in the district. Owing to the reduced landings, prices were somewhat higher than in the preceding year.

No motor boats have yet been acquired by any of the crews of this district. For a part of the year one of the Lybster crews had one on hire. It was used for the prosecution of the line fishing, for which purpose it was very well adapted, and had considerable advantage over the small sailing craft. Unfortunately it could not be kept regularly at work on account of adverse weather conditions, but when favourable opportunities did occur very satisfactory results were frequently obtained.

Lobster fishing engaged the attention of a few fishermen in the district, but no great success attended their efforts. Operations were very much interrupted, owing to the frequency with which creels were destroyed by the heavy seas.

As there is now only one curer who makes barrels in this district, employment for coopers has decreased very much, and a large number have therefore gone to other districts where their services are more in demand.

One of the Lybster fishermen was lost at sea in a rather mysterious manner when on passage from Wick to Lybster in a motor fishing boat. No serious loss or damage to boats or gear was sustained during the year.

There is but one fishery barometer in the district—that at Lybster harbour. It continues to serve satisfactorily the purpose for which it was intended.

JAMES RITCHIE,
Fishery Officer.

FISHERY OFFICE,
WICK, *5th January* 1914.

Wick District.

Taken in their entirety, the fisheries of this district during the past year did not yield such satisfactory results as in 1912, there being a considerable decrease in the quantity of both herrings and white fish landed. One feature of the year was the unusually high prices paid for herrings, owing to which the pecuniary value of the year's work shows but a slight falling off when compared with that of 1912, which constituted a record.

No pronounced advance was made in connection with the means of capture. One second-hand steam drifter was added to the fleet at Wick, which restored the number owned at that port to the figure at which it had stood for several years previously.

A few second-hand first-class sailing craft were purchased by crews of the district, but these, however, did not counterbalance the number discarded. It may be said that the only development effected during the year was the application of motor power to a number of the large sailing craft that are employed at net fishing and yawls used for line fishing.

An extensive shoal of herrings was unexpectedly located, early in January, near to the land on the north coast of Sutherland and Caithness, and some excellent landings were made. Fish were most abundant between Strathy Point and Island Roan, and for about a month a fleet of fully 30 boats fished on that part of the coast. Catches of from 80 to 200 crans were of common occurrence, and so dense was the shoal that a great deal of netting was lost through weight of fish. Indeed, very few were so fortunate as to avoid loss from this cause.

Unfortunately there was at that time a long continuation of south and south-east gales, which prevented fishing craft from getting to Wick with their catches. Scrabster harbour had therefore to be resorted to, at which place there is only a very limited area of water deep enough for berthing, and consequently a large number of boats could not be accommodated. Besides that there was a great lack of facilities for the disposal of the herrings. A considerable portion of the catch had to be conveyed to Thurso railway station for dispatch, and some difficulty was experienced in procuring a sufficient number of horses for that work.

A few of the steam craft landed at Thurso harbour, where they were much nearer to the railway terminus. Fishermen and curers found the venture fairly remunerative, but had better conditions prevailed, much more satisfactory results would, no doubt, have been obtained. It is now some years since so many herrings were landed in the district in the winter season. Prices paid for herrings varied from 5s. to 40s. 6d. per cran. Over all the average price was 23s. 3d. Only the steamers continued to prosecute the fishing up to the close of the season, and their earnings varied from £500 to £1100.

Altogether 14 of the local fleet—2 steamers, 2 motor and 10 sailing vessels—engaged in cod net fishing. That number, however, was not at work throughout the whole season. Besides those, a few Banffshire sail

boats occasionally landed their catches in the district. Operations were conducted chiefly on the Caithness coast between Bruan and the Ord of Caithness.

In general, the results were not over satisfactory, and did not equal those of former years, owing to scarcity of fish. Most of the fish caught were much lighter in weight than in previous years. A keen demand prevailed, and prices considerably above the average were realised. The total quantity of net caught cod landed at the port of Wick was only about one-third of that landed in the previous year. Whatever may have been the reason, there was every indication that fish were more abundant and of better quality further up the Firth.

In the belief that there would be a plentiful supply of herrings upon the grounds, as has been the case for some years past, fishermen and curers made preparations for commencing the summer herring fishing about the middle of May. Every one looked forward to having a repetition of the prosperous season of 1912. Indeed, the prevailing idea was that it might be exceeded, and at the port of Wick the preparations for dealing with the season's catch were, therefore, on a more extensive scale than ever before.

Early in the season there was every indication that Wick was to have a good fleet of fishing craft, as the satisfactory results of the early fishing in recent years had made the port a popular one. In the early weeks of the season the fishing did not prove so successful as was anticipated, and in consequence, a good many of the crews proceeded to other parts of the coast. Some of the curers also drafted a portion of their workers to other stations. Almost up to the end of July it appeared as if the catch was to be an extremely poor one, but, contrary to the experience of recent years, August proved to be the best part of the season, nearly half of the catch being landed during that month.

One prominent feature of the August fishing was the landing of a great number of heavy takes, ranging from 100 to 214 crans. In that respect, there was a great contrast with 1912, when there was only one individual catch of over 100 crans. Throughout the whole of the season fish of very good quality were caught, and the fact that the quality was maintained right up to the end of August surprised every one in the trade. Few could recall such an experience.

Very fine weather prevailed throughout the whole of the season. Indeed, it was generally believed that the fishing would have been more profitably pursued had the weather been of a somewhat rougher character. It was a very rare occurrence for sailing craft to be seen under reefed canvas.

Unusually high prices were paid for the bulk of the herrings landed. The range was from 10s. to 53s. per cran, and from 33s. to 45s. was commonly paid. The average price was 38s 6d., as compared with 26s. 3d. in 1912.

The greatest number of boats that operated from Wick at one time was 325, while in the previous year it was fully 400. Steam drifters had earnings of from £950 to £1950, motors £700 to £1350, and sailers £200 to £800. A number of steamers had individual takes which realised from £340 to £402.

Operations were most successfully conducted from 18 to 30 miles off, from east by north to east-south-east. To most of the fishermen the venture was a very successful one, but the contrary was the case with the majority of the curers, as the prices paid for fresh herrings were much too high to leave a large margin of profit. With some it is to be feared there was no profit.

Arrangements were made by two firms for conducting an extensive trade in the dispatching of fresh herrings, put up in ice and salt, to

Hamburg. Supplies, however, were insufficient to permit of their purchase at a moderate price. Evidently the business was not a profitable one, as operations were discontinued at an early period of the season. The quantity dealt with in that manner was 7733 crans, compared with 5800 crans in the previous year.

As the bulk of the catch at Wick was composed of fish of very fine quality, the cured article was therefore of a high standard, and was keenly sought after by dealers. The high prices demanded by curers was the sole cause of a slow sale at the end of the season.

Owing to the short supply of fish in the month of June, and the absence of any great body of large, empty herrings, there was no great demand in the district for the new Filling and early Mattie brands.

All through, the year was a poor one for line fishing. At the periods when line fishing is most extensively pursued, an unusual continuance of unfavourable weather was experienced, and, in consequence, operations were very much restricted. At the same time fish were not nearly so abundant as during some of the preceding years. The catch was only 60 per cent. of that of 1912.

The results of the crab and lobster fishing did not differ much from those of the previous year.

In the prosecution of the herring fishing on the English coast, 13 steamers, 6 motors, and 1 sailer were engaged. Their voyage was a fairly remunerative one, as steamers earned from £330 to £1100, motors £320 to £600, and the sailer £190.

A further increase occurred in the number of district curers who conducted business at Yarmouth and Lowestoft, for which the success attained in the former year was no doubt accountable. Fortunately, there was another season of immense supplies, for which there was a good demand, and, in consequence, curers had a very profitable season.

Never before were there so many coopers employed at barrel-making in this district as in the first half of the past year, the reason being that stocks were completely exhausted by the successful catch both at home and on the English coast in 1912. Even for the winter fishing on the West Coast in January and February a considerable quantity of stock was required.

The number of boats propelled by motor engines was doubled during the year. Six of the large Zulu boats, owned in the district, were fitted with engines, 3 with Gardner's, and 3 with Kelvin's. Without exception, they have done particularly well. There are now 8 motor boats of the largest size in the district. So far, they have mostly all met with wonderful success, one having earned as high as £1350 at the summer herring fishing, and £2500 for the whole year. Fourteen small motor craft were added to the fleet, of which class there are now 32, used chiefly for line fishing. They met with somewhat indifferent success owing to unfavourable weather and a scarcity of fish, but they are nevertheless very well adapted for the work.

During the year there was an entire absence of any accident, involving loss of life, or serious damage of property.

All the fishery barometers in the district are in a satisfactory condition.

James Ritchie,
Fishery Officer.

Fishery Office,
Wick, *5th January* 1914.

Orkney District.

The most important feature of the district fisheries during the year 1913 was the decreased catch during the early summer herring fishing. Comparing the returns of all fish landed with those of 1912, there is a decrease of 230,236 cwts. in the quantity and £38,791 in the value, for which herrings are chiefly responsible, but though these figures are large in themselves, they lose much of their importance when it is remembered that 1912 was a record year, showing results far above any previous year. The figures for 1913 were 34,558 cwts. less, but £63,580 more than the average for the preceding five years.

The returns of the other branches of the industry, with the exception of shell-fish, were about the average, and show little variation from those of the preceding year. The shell-fish returns exhibit an increase in value of £1936 when compared with the figures for 1912.

In the means of capture returns there is very little change; there is a decrease in the number of boats and a slight increase in the tonnage. This change was caused by old third-class boats being laid aside or broken up as unseaworthy and being replaced by larger ones. The only change worthy of note is the fitting-up of several line and lobster boats with motor engines for auxiliary propulsion. One boat was specially built and fitted with a "Gardner" 8 h.p. motor engine and reversing propeller for the "Bay of Firth Oyster Company." No movement has yet been made by any of the district fishermen to have motors installed into their herring fishing boats, although in this district, where the fishing grounds are only a moderate distance from land, and where the fishermen usually have to contend with strong tides in the different sounds, motor boats would undoubtedly be of great service.

The summer herring fishing which was prosecuted from Stronsay, Sanday, Kirkwall, Holm, Burray, and Stromness will long be remembered by all connected with the industry as one of the most unique on record. To most of the curers it will be remembered as one of the most trying seasons they ever experienced. Fishermen also found it harassing in many ways, but to the majority of them it turned out one of the most successful they have ever had. Owing to the stranger fishermen being continually moving about and landing their takes at the different ports, it is difficult to estimate their earnings, but quite a number of drifters fishing from Stronsay earned from £1400 to £1800, and the average would be £1200. The local fishermen operating with sail boats also did very well. Their earnings ranged from £300 to £1000 per boat, while most of them earned close on £500.

The fishing was opened during the week ending 17th May by a few crews operating from Stromness and Stronsay, and was carried on till the 5th of September by a fleet which varied throughout the season from 50 to 250 boats. The average number of boats operating during the season was 145, as compared with 198 in 1912.

Stromness was the first place at which herrings were landed, a steam-drifter arriving there on 14th May with a shot of 29 crans of fairly good quality. A few crews who operated from this port met with fair success for a week or two. Only two curers opened stations, several others who had intended doing so refraining on account of the agitation among the hired fishermen. Had there been more curers on the ground and a decent fleet at work, no doubt Stromness would have made a good bid to regain the place it held in former years as an important early herring fishing centre. For the few boats at work the season closed early in June with a total of 558 crans compared with 80 crans landed in 1912.

Stronsay continues to be the chief centre at which herrings are landed in the Orkney district. The steady development of this port during the preceding four years has been drawing more curers to the place every year.

In 1912, the Harbour Commissioners decided to go on with a scheme of development—to extend the old pier 300 feet and the new pier 200 feet, and also to dredge out the channel and harbour basin—at an estimated cost of £20,500. In aid of this scheme they were promised a grant of £10,000 from the Development Fund.

The comparative failure of the fishing during the first half of the season was attributed by fishermen to the presence of a large shoal of mackerel on the grounds. Fishermen reported the shoal of mackerel to extend from a few miles off land to 60 miles off. It frequently happened that some boats caught 60 and 70 crans of mackerel, and after clearing their nets of these fish, shot their drift the following night on the same grounds and landed heavy shots of herring.

Towards the end of July, when the mackerel disappeared from the fishing grounds, a welcome improvement set in, and the fleet operating from the port had a most successful time until the end of August. Unfortunately for curers, the fleet was small, and as the demand was always much greater than the supply, prices were maintained at a higher figure than the prices for the cured article warranted.

The principal fishing grounds were from 4 to 15 miles off Auskerry and Copinshay, and 30 to 60 miles east-by-south to south-by-east from Stronsay. The best quality was generally landed from the more easterly and more distant grounds. As the bulk of the fish was caught at a moderate distance from land, fishermen were able to arrive early in the day, and to deliver their fish in good condition, thereby giving curers the opportunity of making the best possible cure and of turning out a first-class article.

During the first week or two of the fishing the quality landed varied from poor to fairly good, and prices for May fish ranged accordingly from 10s. to 39s., the average price being 22s. 1d. per cran.

From the second week of June the herrings rapidly improved in quality, and, as there was a pretty strong demand at that time for cured herrings of good quality, curers shipped them away as fast as they were being cured, at prices which left them with a fair margin of profit. For June herrings prices ranged from 30s. to 45s., the average price being 38s. 6d. per cran.

As the season advanced the quality became excellent, most of the takes consisting chiefly of full and lafull fish. For a number of years back America and the Continental markets depended mainly on Shetland to supply them with these herrings, but, as the Shetland fishing yielded poor results, Stronsay curers naturally concluded that the supply of lafulls would be short.

The result was that the demand for fresh herrings became very keen, and prices were maintained at an abnormally high level. The highest price ever paid for curing at Stronsay was touched on 19th July, when 53s. per cran was paid for a shot of herrings. The average price for the month of July was 45s. per cran.

The quality remained very fine until the middle of August, but from then it became mixed, and towards the end of the month spent fish predominated. The average price paid during August was 39s. 10d. per cran. For the season the average price was 40s. 10d., compared with 28s. 10d. in 1912, and 23s. 10d. per cran in 1911.

When the herrings became suitable for branding, most of the curers selected their herrings for the brand, and of the total cured 34,945 barrels or 31 per cent. were branded, compared with 26,402 barrels or 14 per cent. of the cure of 1912.

An idea of the good quality landed may be got from the fact that 79 per cent. of the herrings branded were full and lafull fish.

Of the total catch of 90,846 crans landed in the district, 85 per cent. was landed at Stronsay, while the remaining 15 per cent. was divided between Sanday, Kirkwall, Holm, Burray, and Stromness.

With the exception of a small quantity kippered at Kirkwall, and 1174 crans exported to Altona in boxes with ice and salt by a firm of "Klondykers," all the herrings landed were cured gutted. The total number of barrels cured was 112,450, and of these 87,862 were exported direct, 24,211 were sent coastwise, and 377 were lying on hand in the district at 31st December. Of the direct shipments 40 per cent. was sent to Russia and 60 per cent. to Germany.

The greater proportion of those sent coastwise was destined for Germany and America.

The following table shows the number of boats at work during each week of the herring fishing, the quantity landed, and the average price for each week, compared with the corresponding particulars in 1912 :—

1913.						1912.			
Week ending.		Boats Fishing during Week.	Total Crans Landed.	Average Price per Cran for Week.		Boats Fishing during Week.	Total Crans Landed.	Average Price per Cran.	
		Av. No.		s.	d.	Av. No.		s.	d.
May	17	3	68	20	3	55	932	10	1
,,	28	65	1,540	18	8	70	3,433	11	5
,,	31	70	784	29	0	150	8,358	12	8
June	7	90	1,615	30	6	185	8,886	19	8
,,	14	90	1,259	34	9	145	4,935	29	6
,,	21	120	6,456	39	2	230	16,585	27	6
,,	28	250	12,368	39	8	350	10,387	29	2
July	5	220	5,480	41	3	290	15,929	33	1
,,	12	180	3,220	43	5	270	15,917	32	7
,,	19	190	7,739	47	9	270	17,947	33	9
,,	26	240	15,441	45	7	290	16,522	30	1
Aug.	2	160	1,983	43	5	255	13,978	30	3
,,	9	110	5,969	43	10	206	12,438	29	4
,,	16	100	7,283	42	1	160	4,547	33	4
,,	23	140	10,951	37	10	100	2,914	30	11
,,	30	150	7,085	37	11	25	844	30	8
Sept.	6	70	1,605	35	0	...	...	...	

Table showing the quantity and value of herrings landed in the Orkney district during the past five years :—

Year.	Total Crans Landed.	Total Value.
1909	45,462	£59,259
1910	93,089	92,543
1911	114,753	136,760
1912	154,605	221,652
1913	90,846	185,564

The landings by English trawlers, which consisted chiefly of cod from Icelandic waters, were all used for curing purposes and exhibit a decrease of 4337 cwts. in quantity and £1010 in value from the figures of 1912.

The quantity landed by foreign trawlers and Faroe smacks also shows a falling off, to the extent of 4608 cwts. in the quantity and £807 in the value.

Prices for trawled fresh gutted cod averaged about £8 per ton, the same as in 1912, while Faroe wet salted cod realised from £18 to £19 per ton, the bulk of the landings being sold at the latter figure. These prices show an advance of about £3 per ton over those of the previous year.

Line fishing by local fishermen was carried on in the usual desultory fashion. The results for the year were about the average and show little variation from those of the preceding year.

Lobster fishing was prosecuted from almost every creek in the district, principally during April, May, June, September, and October. This fishing, which has been declining for some years back, showed an improvement during the year under review.

With the exception of the drowning of a fisherman belonging to St. Margaret's Hope, who fell overboard, there were, fortunately, no fatal accidents during the year, and the loss to boats and fishing gear was small.

A. J. Munro,
Fishery Officer.

Fishery Office,
Kirkwall, *5th January* 1914.

Shetland District.

The returns of fish landed in Shetland district during 1913 show decreases of 695,840 cwts. and £196,425 as compared with the figures for 1912. The failure of the herring fishing during the late summer and autumn was the principal cause of this decrease; but there was also a great falling off in the landings of haddocks. Notwithstanding, local fishermen had a most prosperous season, owing to the fact that when the herring fishing revived in August, they were left to reap the harvest practically alone.

In the means of capture returns a decrease in the number of first-class sail boats has again to be recorded. A few second-hand boats were purchased from other districts, but not nearly sufficient to make up for the number written off as no longer employed in fishing. In second-class boats there was little change. Two motor skiffs were added to the fleet, but 2 were withdrawn from the fishery register to be used for other purposes. There was a considerable decrease in the number of third-class boats. One steam drifter was added to the local fleet, and there is a prospect of several more being brought to the district before next season.

The winter herring fishing was commenced by a few drifters towards the end of January, but very little success was met with till the second week of February. During the last three weeks of February and the first fortnight of March, however, a dense shoal of herrings lay off Baltasound. Favourable weather permitted fishermen to get fairly regularly to sea, and heavy catches were secured, shots of 100 crans and upwards being frequently landed. The best catch for the season—208 crans—was landed at Lerwick on 25th February. About a score of steam drifters were employed, some of them, however, for only part of the season, as against a dozen in 1912; the total catch to the end of March was 6940 crans against 3190; and prices ranged from 13s. to 31s. 6d., or an average of 17s. 9d. against 14s. in 1912. One crew's earnings for 6 weeks amounted to £800, and most of those that worked the whole season had from £300 up to £700. Over 5600 barrels were cured for exportation, and the balance

purchased for bait or for kippering. Local curers are seriously handicapped by the fact that the Shetland winter fishing does not commence till near the close of the Irish and Hebridean fishings ; and it has thus often been difficult to sell the Shetland cure. Last season the demand was much better than usual, and prices ranged from 24s. 6d. to 27s. per barrel for Lafull and Full, and 21s. to 22s. for Spent, as compared with 20s. for Lafull, and 18s. for Spent in 1912. The greater part of the herrings purchased for bait went on board Aberdeen steam liners, but some consignments were chilled and sent to Faroe by the Danish mail boats.

In the month of April only small lots were landed, and mostly purchased for bait. The summer herring fishing opened in the beginning of May, but not more than 50 to 60 boats were working, and Lerwick and Scalloway were the only stations then open. By the middle of the month, however, between 300 and 400 had started fishing, and most of the stations were open. The fleet steadily increased to a total of about 800 boats for Shetland district for the first week of June, and was maintained at from 500 to 700 boats, steam and sail, till the beginning of July. The weather then turned very calm, with clear skies at night ; and the fishing, which had opened very well, completely collapsed, with the result that both Scottish and English steam drifters had practically all left Lerwick by the middle of July. By the end of July the fleet fishing at Lerwick had shrunk to about 30 boats, and the landings for the last week of July and first week of August were only 507 and 668 crans respectively. As August advanced the local sail boats were more successful, and some steam drifters returned to Lerwick and fished for a few weeks. Herrings appeared then to be fairly widely spread, both eastwards and southwards, and with the high prices that were being paid, very good earnings were made both by steam and sail boats.

The season's range of prices was from 8s. per cran early in May to 56s., which was frequently paid for herrings for curing purposes between 18th and 24th July at Lerwick. In fact the daily average price at Lerwick was above 50s. per cran for most of July. As, however, the bulk of the catch was landed early in the season, when prices were still moderate, the season's average price for Shetland did not much exceed 33s. per cran as compared with 27s. in 1912.

There were only 6 stations opened at Baltasound, as against 13 the previous season, and there was a great falling off in the catch, as was the case at all the out-stations except Whalsay, which had a better record than in 1912. Besides Lerwick, there were curing stations at Scalloway, Burra Isle, Walls, Snarraness, Hillswick, North Roe, Baltasound, Uyasound, Whalsay, Hoswick, Levenwick, and Grutness, but at most of these places there was only one curing station.

Although the district totals show a decrease of nearly 50 per cent. in the quantity and 36 per cent. in the value of herrings, local fishermen had an exceptionally good, if not a record, season. A much larger proportion of the catch than usual was landed by local boats, and they were doing best when prices were highest. At least 2 sail boats had upwards of £1000 to their credit, the best crew having £1200 for the summer fishing. A good many had from £600 to £800, and the average for the district must have been almost £500, or more than £100 better than in 1912. Of 5 locally owned steam drifters 4 were manned by local fishermen, and they averaged considerably over £1500—the best season they have ever had. For the first part of the season the English fishermen had probably higher average earnings than last year, and the few Scotch and English drifters that returned to Lerwick in August were very successful for the short time they then fished in Shetland waters ; but since none of them worked the whole season here, it is impossible to give anything like an accurate estimate

of the average earnings of strangers who participated in the Shetland herring fishing.

Although the cured market was in a very satisfactory condition, and curers did very well in May and June, the subsequent collapse of the fishing led to such a keen competition for the few herrings that were landed, and entailed so much expense for wages, removal of stock to other stations, etc., that most curers finished the season with adverse balances. Highest prices for cured herrings were quoted in July, when, for several weeks, Lafulls were selling about 50s. per barrel, and Full from 42s. to 45s. Throughout August Lafull sold at from 43s. to 45s., and Full at about 2s. less; and La Spent, which were not on sale till after the middle of August, brought from 33s. to 34s. 6d. till the middle of September, after which balances of all selections were difficult to sell at reduced prices.

One Lerwick vessel was fitted out for curing at sea, but carried only an ordinary fishing crew, who ran to port and sold their best catches fresh. In the course of the season, however, they cured over 300 barrels of herrings on board. Nine small Scandinavian sailing or motor vessels were at Lerwick in the late summer or autumn, and their crews cured about 1000 barrels of mackerel which they bought from British fishermen. A few hundred barrels were also cured on shore by local fishcurers.

No vessels were specially chartered to carry roused herrings to Hamburg, but upwards of 500 crans were sent early in the season by the Leith steamers which traded between Lerwick and Hamburg. As the season advanced this business had to be given up on account of the high prices that were being paid for the fresh herrings here.

The quantity and value of cod, ling, etc., were slightly less than the figures for 1912 (which, however, had included about 300 tons of trawled fish from Iceland). The bulk of the fish landed in 1913 was caught by the herring fishermen in summer by hand lines. The small-line fishing proved the poorest for many years, the landings of haddocks showing a decrease of about 50 per cent. as compared with the previous season. Stormy weather, with prevailing westerly gales, accounted for the decrease at Scalloway, but fish were scarcer on the Lerwick grounds, especially in the autumn, than they have been for many years.

Five local steam drifters went to the herring fishing on the English coast, where they averaged £829. For the whole year their earnings averaged £2523, but none of the boats was employed for more than nine months. The most successful Shetland steam drifter earned about £3200 for the year.

Coopers had an exceptionally good year. The outlook was not too bright for a week or two at the close of the Shetland herring fishing, but large shipments of stock were taken from Lerwick to Yarmouth and Lowestoft, and all the coopers were re-engaged.

No first or second-class boats were built in the district during the year. The output of small third-class boats was normal. Carpenters were kept busy during the summer, but work turned slacker after the close of the herring fishing.

There was fortunately no loss of life in connection with the fishing during the year—rather a remarkable fact considering the extent of the industry. With the exception of a first-class boat which was sunk as the result of a collision during the herring fishing season, there were no serious accidents to the fishing fleet, and owing to the fine weather experienced during the herring fishing season there was very little loss of fishing material.

Increased attention is being given to the teaching of navigation to fishermen, and classes are being conducted at a number of centres throughout the islands. Special classes for the instruction of teachers were arranged at Lerwick during the summer and Christmas holidays, and

these were well attended by teachers from all parts of the district who are thus better qualified to impart instruction to their own pupils.

The fishery barometers are in good order, and generally well attended to.

Satisfactory progress has been made during the year with the new harbour works at Lerwick.

R. Duthie.
Fishery Officer.

Fishery Office,
Lerwick, *7th January* 1914.

III. WEST COAST.

Stornoway District.

The quantity of fish landed in this district in 1913 was 606,212 cwts., valued at £192,758, against 367,698 cwts., valued at £130,540, in 1912. The increase was chiefly attributable to herrings, of which 524,250 cwts., valued at £170,766, were landed. The line fishing returns show a marked decrease, local fishermen having been less successful than in former seasons, while fewer steam liners from other districts landed fish. The quantity brought in by trawlers totalled only 58 cwts.

Local herring boats fished in home waters during the year with good success, but none went to the English or Irish fishings. Owing to a strike of hired men, who demanded payment on the gross earnings of boats, only 800 were employed during 1913, as against 1600 in 1912. The remainder had to find employment elsewhere on shore.

Classes for the instruction of fishermen and hired men in navigation were not conducted. Continuation classes were, however, and if fishermen had so desired they could have been enrolled, and instructed in that subject. None, however, attended the classes for that purpose.

Two thousand four hundred women workers went to Shetland and the East Coast, in May and June, returning towards the end of September. Shortly thereafter, 1613 proceeded to England to take part in the curing of herring at Lowestoft and Yarmouth, where they earned, and brought home to the Island, a considerable sum of money.

Five first, 19 second, and 3 third-class boats were removed from the register during the year. These were replaced by 5 first, 9 second, and 3 third-class boats, of which 2, acquired from other districts, had motor-power.

Good success attended the prosecution of the herring fishing during the winter and spring. The catch was the best, both as regards quantity and quality, which has been obtained since the inception of a winter fishing in this district. One hundred and thirty-five steam drifters, 2 motor, and 21 sailers were at one time employed. The principal fishing grounds were Broadbay, off Tolsta, and off Cellarhead. 39,462 crans were landed in January, 48,088 crans in February, and 16,365 in March, or a total of 103,915 crans, valued at £87,876. Many boats grossed from £700 to £900, and the average for 135 vessels was £600. The average price per cran was 16s. 10d. The few motor-boats and sailers engaged were less successful, owing partly to the boisterous weather which prevailed during the greater part of the season.

The early summer and autumn herring fishings were disappointing in comparison with the corresponding seasons in 1912. The fishing was opened during the week ended 17th May by a fleet of 98 steam and 13 sailing boats, which landed 2573 crans. During the following two weeks, 200 steamers and 60 sailers were engaged. Light catches were the rule,

however, and the fleet dispersed for other districts towards the end of May. Local boats, as well as a few sailers from other ports, continued fishing, but with poor success, up to the 16th of August, by which time local boats only were left. By the 20th of December 100 steam drifters had again assembled, and the fishing was prosecuted up to the end of the year with fair success. The catch from 1st April to 31st December was 45,068 crans, valued at £82,888, as compared with 64,342 crans, valued at £94,642 for the corresponding period in 1912. The average price per cran was 32s. 4d., as against 29s. 1d. for the corresponding period of the preceding year.

The cod and ling returns exhibit a considerable shortage as compared with 1912, fewer boats having been engaged in line fishing at the out-stations and creeks, where formerly considerable quantities were cured dried for sale. Line fishing by local boats for curing purposes is on the decline. Trawlers and steam liners have now almost discontinued landing any of their catches at this station, although many occasionally come to anchor in the harbour.

Small-line fishing was occasionally prosecuted by local craft, but the catches were consumed locally, few, if any, being dispatched to the southern markets in a fresh, or smoked, state. Small quantities were, however, sometimes smoked at Stornoway, chiefly for local use.

Considerable quantities of mackerel were landed during the year by boats engaged in herring fishing, and 1000 barrels were cured for America, the fish being purchased at about 5s. per cran. Even at this figure curers had to discontinue curing them, owing to unsatisfactory returns from the American markets. Hundreds of crans had to be put overboard in, and outside, the harbour, from June to August, but during the early part of the year, and towards the end of December, there was a fair demand, and small quantities were dispatched in a fresh state to the southern markets. The average price per cran was 10s. 6d., as against 7s. 6d. in 1912.

The shell-fish returns show a slight increase in value, although the catch of lobsters was less than in 1912.

ALEXR. SUTHERLAND,
Fishery Officer.

FISHERY OFFICE,
STORNOWAY, 10*th January* 1914.

Barra District.

The very considerable increase in the aggregate results of the fisheries for the year 1913 is due especially to the herring fishing, which shows an increase of 61,531 cwts. in quantity and £45,985 in value over the returns for the previous year. The total quantity and value of all fish landed (exclusive of shell-fish) amounted to 130,703 cwts. and £81,098, compared with 80,999 cwts. and £37,831 in the preceding year. The shell-fisheries realised £6848, an increase of 8 per cent. on the previous year's figures.

In the means of capture a slight increase in the number of second and third class boats was recorded. The extent and value of fishing gear remain much the same as in the previous year. There is no sign of any attempt being made to introduce steam or motor power vessels into the district, and out of a total of 303 boats only one is installed with auxiliary motor power. The advantages of the power vessel over the ordinary sail boat are well appreciated by the native fishermen.

The great-line fishing, which is only participated in by the district fishermen, was a complete failure. During the greater part of the season ex-

ceptionally stormy weather was experienced, with the result that the boats were at sea on few occasions. When the boats were able to be at sea results were very unsatisfactory, fish being scarce on the grounds, which lay from 3 to 7 miles east to south-east from the Island of Muldoanich and Pabby Bank. The average gross earnings derived from this fishing were only £27 per boat, as against £113 per boat for the season of 1912.

The herring fishing commenced on the 13th May and was prosecuted with considerable success until towards the end of August. The larger proportion of the fleet employed consisted of sail boats. During the early part of the season weather conditions were favourable, and the fleet was able to prosecute the fishing with regularity. During the months of July and August unfavourable weather was experienced, and the sail drifters were for the greater part of this period lying in port. The most productive fishing grounds were Gunna Sound, Coll Bank, and the vicinity of Heisker, Canna. The inshore grounds on the east side of Barra were unproductive. The Atlantic grounds on the west side of Barra, which in past years were the principal herring fishing grounds in this district, were unfrequented. In the latter part of May and the first half of June dense shoals of herring were located in Gunna Sound, and many splendid shots of fair quality were secured. The demand throughout the season was very good, prices ranging from 25s. to 91s. per cran, with an average for the season of 49s. per cran. The advantage which mechanical power in fishing vessels confers in rendering access to the most productive fishing grounds more certain was fully demonstrated throughout the whole season. On one occasion, for instance, several sail boats which reached the distant fishing grounds secured shots ranging from 120 to 180 crans. A number of these boats, owing to light and contrary winds, were unable to make the port until the following morning, when their fish, owing to the summer heat, were almost useless, with the result that the fishermen had to accept from 3s. to 5s. per cran, whereas if the fish had been landed in good time on the day of capture they would have realised anything from 70s. to 80s. per cran.

The earnings of the fishermen belonging to the district were among the lowest on record. The local fleet, with the exception of one auxiliary motor boat, consists chiefly of medium-sized sail boats, and the majority of these boats being unable to prosecute the herring fishing on the mainland side of the Minch, where practically all the fish were secured, have, in consequence, fared very badly. The highest individual gross earnings of these boats amounted to £460, and the lowest £32. The average gross earnings for the year were only £101, as compared with £280 in 1912. The local motor boat grossed £540, as against £497 in the previous year. The gross earnings of East Coast boats ranged from £510 to £1525 for steam drifters, £460 to £728 for auxiliary motor boats, and £246 to £715 for sail boats. The season was the most successful financially ever experienced in Barra by East Coast fishermen. Out of an aggregate total of £79,340 derived from herring fishing only £8460 was earned by local fishermen.

The shell-fisheries form a source of regular employment for 170 fishermen and boys. In the spring months unsettled weather hindered operations, and little was done. During the summer months, however, weather conditions were on the whole favourable, and a regular fishing was carried on, with the result that the season's total value shows an increase of 8 per cent. over the previous year's figures. The gathering of unclassified shellfish was carried on in the spring months with favourable results.

The year under review was a most unremunerative one for the district fishermen. Although the total value of fish landed greatly exceeded the previous year's figures, a very poor proportion was secured by local boats. The aggregate gross earnings of local fishermen from the various branches of the fisheries was only £16,600. Of this amount the herring fishing is

credited with 52 per cent., white fishing 7 per cent., and the shell-fisheries 41 per cent. The aggregate earnings in the preceding year were £30,400, the corresponding percentages being 67, 13, and 20 respectively.

A. B. Stephen,
Fishery Officer.

Fishery Office,
Castlebay, 5*th January* 1914.

Loch Broom District.

The results of the fishing operations conducted throughout this district during the past year were again very moderate. Compared with 1912 the figures show a welcome increase in the quantity and value of white fish landed of 3521 cwts. and £907 respectively, and of £228 in the value of shell-fish, but when compared with the average yield for the previous ten years they exhibit the large decrease of 45,306 cwts. in quantity and £7217 in value, and of £7530 in the total value including shell-fish. The poor results obtained from herring fishing account largely for this decrease, but small-line and hand-line fishing, which were less productive than in former years, contributed considerably to the total decline.

There is a further shrinkage in the number and tonnage of fishing boats. Seventeen boats were struck off the register, while only 4 second and 3 third-class boats were added thereto, making a reduction of 10 boats and 97 tons. With the advent of the steam drifter and motor boat there is now less opportunity for the crofter fishermen working with their small boats of 16 to 18 feet keel and benefiting by the visits of herrings to the lochs of the district. They find it difficult and dangerous to use these small boats alongside of the larger craft in the narrow waters of the lochs. No progress can yet be reported in the installation of motor power into existing sail boats in the district. Only one skiff had this means of propulsion installed during the year. Although there are a good number of skiffs suitable for auxiliary motors whose owners could well afford the experiment, there seems no inclination on their part to follow the example of fishermen of other districts who have benefited by the change.

There is practically no change in the quantity and value of gear in use, the only alteration from the previous year being a slight increase in the area and value of netting, due to the better maintenance of gear by the fishermen with first and second class boats.

Although herrings were landed in every section of the district and the total landings were better than last year by 5740 cwts. in quantity and £1645 in value, this branch of the fisheries must again be classed as a failure. At Lochclash 300 crans were landed in January and February by steam drifters which could not dispose of their catches at Stornoway, but this station was not used as a fishing centre. A light, irregular fishing was landed in Lochinver section by the local small boats from June to October, but the total catch for this period did not exceed 400 crans. Towards the end of December, however, a shoal of herrings made its appearance in Lochinver, and on the last two days of that month the local boats landed a total of 580 crans. These herrings were of mixed quality, and there being few buyers on the spot, prices were low and ranged from 12s. to 17s. 6d. per cran.

The Loch Broom herring fishing was again very disappointing. Herrings made their appearance at the entrance of the loch at the beginning of October, and during the next fortnight a fleet of 40 boats, mostly local,

landed a successful fishing at Ullapool. These herrings were caught in the vicinity of Priest Island, and there was every indication that a large shoal of herrings was present. Fishermen were hopeful of the shoal finding its way farther into the loch, but in this they were disappointed, just as they have been for the last few years in similar circumstances. The fishing fell away completely after 11th October. The fleet was soon augmented by boats from almost every district in Scotland, and a number came from Ireland, but they dispersed after a few blank hauls. The total catch for the fortnight was 835 crans, valued at £1238. This money was well distributed over the local crews, but a few of them were well above the average, one skiff grossing £110.

Herrings were landed at Aultbea from July to October, but September was the only month in which the fishermen had anything approaching success. A small fleet landed a total of 782 crans which were caught off Greenstone Point and at the entrance to Loch Ewe.

The catch of herrings at Badachro amounted to 1491 crans of the value of £1936. These were landed during eight months of the year, but the best results were obtained in September. During that month a fleet of 35 boats was employed, and although the fishing was only fair, the high prices obtained enabled fishermen to make earnings which ranged from £70 to £200 per boat.

The quality of the herrings landed throughout the district was generally good, and owing to the keen demand for curing purposes prices were very satisfactory, ranging during the summer and autumn from 22s. to 40s. per cran.

Five first-class boats belonging to Lochinver and Coigach sections took part in the Stornoway and East Coast summer herring fishings, and grossed from £170 to £870 each, or an average of £380 per boat.

The fishermen engaged in the cod and saithe net fishing from Badachro in spring had another successful season. The total catch amounted to 7965 cwts., of the value of £1926, which exceeds that of last year by 453 cwts. and £121. Thirty boats were employed, and earned from £28 to £110 per boat, the general run being from £45 to £65 each. Practically all the fish were cured for drying purposes, and prices, except for a few days previous to Good Friday, ranged from 6d. to 1s. for cod and 2d. to 6d. for saithe. There were plenty of fish in Gairloch Bay and in the vicinity of Longa Island, one boat landing an average of 200 fish in 8 successive shots, but stormy weather during February and March often kept the boats ashore.

Line fishing again gave poor results, the total taken by this means of capture showing a falling off of 2071 cwts. in quantity and £747 in value, when compared with 1912. A large part of this decrease is accounted for by the partial failure of the hand-line fishing for cod and saithe in Stoer Bay, but the stormy weather experienced during the first and last quarters of the year lessened the line fishermen's opportunities.

The shell-fisheries of the district were prosecuted with a fair amount of success. There was a decrease in the quantity and value of whelks gathered, but the value of lobsters caught shows an improvement on that of the previous year of £289. In the southern sections of the district the lobsters caught are generally of a small size, but north of Coigach better-sized fish are got, and especially in Lochs Laxford and Inchard and north to Cape Wrath, where a fixed price of 1s. 2d. to 1s. 4d. each is paid.

Herring curing for exportation was carried on at Lochclash, Lochinver, Ullapool, Aultbea, and Badachro, but part of the catch of the latter 3 stations was roused and sent to Stornoway to be cured. Badachro is the only place in the district where fish-curers are stationed all the year round ready to deal with a fishing, and, in addition to their share of the catch

there, two of the firms brought herrings in a roused condition from other districts for curing.

Six firms were employed freshing and curing cod and saithe at Badachro.

Direct exportations consisted of one part cargo of 378 barrels of cured herrings from Lochclash to Königsberg. The rest of the district cure was exported to the Continent and America *via* Leith, Stornoway, and Glasgow.

No classes were held for the instruction of fishermen in navigation or any other subject.

The extension of the east end of the pier at Ullapool has now been completed, and good progress is being made with the work on the western portion.

There was fortunately no loss of life at sea in connection with the fisheries of the district.

The barometers at Ullapool and Badachro are in good order.

JAMES MAIR,
Fishery Officer.

FISHERY OFFICE,
ULLAPOOL, 8*th January* 1914.

Loch Carron and Skye District.

The aggregate returns of fish landed in Loch Carron and Skye district for the year 1913 show a decrease of 19,974 cwts. in quantity, and of £4643 in value, from the figures for the previous year. Practically all kinds of fish are involved in the decrease, but the chief shortage is in herrings. The only species that show an increase are saithe and hake. In shell-fish, lobsters and whelks show an improvement.

In the means of capture returns there is a reduction of 47 boats. No less than 65, chiefly of the third class, were cancelled during the year as being unfit for further fishing. The number added to the registry to take the place of those struck off was 18. In almost all the crofting fishing villages a gradual decline is going on, in so far as the fishing industry is concerned. The places which retain the most apparent degree of prosperity are those where the fishermen have been able to instal motor engines in their boats. It is interesting to note an increase in the number of motor boats. One new first class skiff was built specially for the reception of motor power, and 5 of the existing sail boats—chiefly of the second class—had motors installed. The number of motor boats now belonging to the district is 20, and a further increase is expected in the near future, fishermen being fully alive to the advantages of motor-propelled boats. The favourite type of engine is the "Kelvin" of 13 h.p., costing £130 with reversing gear, and £110 with non-reversing gear. Although the fishermen of the creeks where motor power has been adopted have been successful in their calling, it has not stemmed the tide of emigration, as some villages are entirely depleted of young unmarried men. Owing to this fact, there is a decrease of 187 in the number of fishermen. Fishing gear also shows a reduction.

Line fishing shows no improvement, few crews now following this branch of the fisheries except to supply fish for local requirements. A number of Loch Carron skiffs—both motor and sail—made a successful fishing with fixed ground nets during February and March. Their catches consisted principally of saithe and hake. Hake appeared fairly plentiful on the grounds between Applecross and the island of Raasay, and owing to

the good prices ruling for that fish the season proved a profitable one, the most successful boat grossing about £120.

The winter herring fishing (continued from the previous year) was fairly successful. The principal centres were Loch Bracadale and Dunvegan. In Loch Bracadale a dense shoal of herrings remained throughout the winter months, but owing to a succession of southerly and westerly gales only steam drifters were able to participate in the fishing. There are no curing stations in the vicinity of Loch Bracadale, consequently motor skiffs were hindered from prosecuting the fishing, as they were unable to undertake the stormy passage to Mallaig, where the bulk of the herrings were disposed of. The fishing in this loch is a precarious one during stormy weather. No less than 3 Moray Firth steam drifters got stranded on sunken rocks within a fortnight, and required the services of a salvage vessel before they could be got off. The season closed about the end of February with a catch of 3838 crans, valued at £3457.

The summer and autumn herring fishing was commenced in the month of June. Fish appeared in most of the district lochs, but the chief centre during the earlier part of the season was at Uig. A fair fleet of local craft operated in Loch Snizort, but the fishing was not a successful one, catches being comparatively light throughout the season. In contrast to former years, when the bulk of the catch was sent to other districts to be cured, the whole catch this year was prepared for export in the locality, seven stations being now available for that purpose. The quality of the fish was good, and the whole catch was exported to the Continental and American markets, chiefly *via* Leith and Glasgow. The season closed about the end of September, the catch showing a reduction of 4187 crans, as compared with the previous year's figures, and although several attempts were made after that date the fishing proved a failure.

In Loch Bracadale the fishing commenced about the close of the Loch Snizort season, and continued until about the close of the year. The general results were disappointing. No doubt the exceedingly stormy weather during the last three months of the year proved a great drawback, and consequently the fishing was very irregular. On several occasions some heavy takes were secured, only, however, to be followed by a complete blank. The bulk of the fleet consisted of stranger boats, principally from the East Coast and Barra. As in the case of the winter fishing, steam drifters proceeded with their catches to Mallaig, where they secured a good market for their fish, prices ruling from 22s. to as high as 50s. per cran, while the smaller craft, and even large sail boats, were forced to dispose of their catches in the loch to buying steamers and smacks at considerably reduced prices, viz., from 24s. to as low as 8s. per cran. The quantity of herrings recorded for the creek is similar to that of last year, but the quantity netted in the loch by steam drifters and landed at Stornoway and Mallaig is small, compared with last year's figures. It may be mentioned that during November and December 1912 the principal fishing ground of the Mallaig and Stornoway fleets was in Loch Bracadale. The quality of the herrings towards the end of the year was indifferent, the fish being mostly spent.

The mackerel fishing resulted in a slight decrease. The principal mackerel fishing stations are Portree and Kyle, and the usual fishing ground is round the islands of Raasay and Scalpa. The bulk of the catch was despatched to the English markets in a fresh state. Owing to the unremunerative returns for cured mackerel in the previous year, only 21 barrels were cured, which were shipped *via* Glasgow and Liverpool to America, and sold at about 41s. 6d. per barrel. The average price of mackerel was 16s. 5d. per cran. One of the chief drawbacks to the development of mackerel curing is the scarcity of skilled labour. Consequently

the fish usually lie for several hours in hot weather before the first process of cure is commenced, and the fish are not therefore in a condition for making a good cure. It is only when the price of mackerel is unremunerative in the fresh markets, or when boats arrive too late to catch the daily steamer or trains, that any attempt is made to cure this class of fish.

The district motor boats had another successful season, their earnings for the year ranging from £200 to £500, with an average of about £300, while those of sail boats of a similar class may be set down at from £50 to £180, with an average of about £90.

The shell-fish branch of the fisheries was actively engaged in. Lobster fishing, the most valuable branch, resulted in an increase of £1717. The crab fishing is of little account, the crabs being of indifferent quality. Whelks show an increase of £159. This class of shell-fish appears plentiful at many creeks, and no doubt the output might be increased.

During the year 5135 baskets were branded, a decrease of 967 as compared with the previous year.

There are no classes for the technical instruction of fishermen, or other persons connected with the fishing industry, conducted in the district.

Unfortunately the year did not pass without loss of life. One lobster boat from Waternish was swamped while engaged in lobster fishing, and the crew of three men drowned.

JAMES YOUNG,
Fishery Officer.

FISHERY OFFICE,
KYLE, *7th January* 1914.

Fort-William District.

The principal feature of the fisheries of this district during the year 1913 was the phenomenal success of the winter herring fishing during the early part of the year. Commencing in December 1912, this fishing continued with wonderful productivity right on to February, and the fact that it was confined to Loch Bracadale indicates the density of the shoal located there.

Compared with 1912 a first glance at the year's results seems to indicate that the steady expansion recorded during the past few years in this district as a whole has been arrested. Closer examination, however, reveals the fact that, at the two principal creeks, Mallaig and Oban, in spite of adverse weather conditions during the first quarter of the year, and the absolute failure of the autumn loch fishing, results are well maintained. At Mallaig the increase is only 753 cwts. in quantity, but nearly £8000 in value, while Oban has a small decrease in quantity and an increase of £400 in value. The district totals show a reduction of 2686 cwts. in quantity and an increase of £7699 in value.

During the year the motor-driven fleet belonging to the district was increased by 3. These were fitted with engines ranging from 10 to 26 b.h.p., and from £90 to £270 in value. The engines installed were 2 Kelvins and 1 Detroit, U.S.A., one of the former being a twin screw. The returns, although showing a decrease in the number and tonnage of vessels, exhibit an increase in value entirely attributable to the installation of motor engines.

The phenomenal herring fishing in Loch Bracadale noticed in last year's report as being in progress at Mallaig toward the end of 1912 was successfully carried on into February. In January over 30 steamers were still engaged and some remarkable earnings reported. One vessel was credited with over £500 for 7 landings. Operations so extensive, with boisterous

weather in contracted waters such as these, necessarily exacted a heavy toll on gear, and in several cases vessels suffered damage. Towards the end of January some good shots were secured off Dunvegan Head, and later on, operations were conducted on Coll Bank. The quality was generally good until spent fish made their appearance. Landings at Mallaig were augmented by several heavy shots from Stornoway waters. In spite of the abnormal landings prices maintained a high level throughout—the fishing thus proving very remunerative to fishermen.

Results at Oban were of a more moderate order. A few steamers operating on Coll Bank and off Dhuheartach landed light and irregular supplies during January and February, which were eagerly bought at good prices. The only vessel operating from this port during the entire season grossed about £620 for 19 landings.

Early in May the fleet was again on the West Coast, working from Mallaig and Oban. On this voyage only very moderate results were obtained. The best landings were recorded during the second week of the season, the fishing ground being off Coll. Quality during May was poor but improved rapidly, and with light supplies prices advanced until a very high level was reached. For the week ending 14th June the average price was 63s. 6d. per cran. On 3rd June some fine shots ranging from £112 to £260 in value were landed at both ports. Throughout the summer months a few steamers made irregular landings at both ports, for which high prices were paid. During the autumn a few motor and sail boats exploited various lochs from Mallaig with indifferent success. The experience of last year, together with somewhat favourable evidence that herrings were again in Loch Bracadale, hastened the return of steamers from the English fishing, but unfortunately, and contrary to expectations, the loch fishing during December was very unproductive. For weeks a good fleet worked in and about Loch Bracadale, but excepting a few stray shots, anticipations were disappointed. The average price for the year works out at 26s. 4d. per cran, against 25s. 3d. for 1912.

Kippering was engaged in by 4 firms during the early summer fishing, 2 at Mallaig and 2 at Oban. The quantity disposed of in this way was fully double that so treated in 1912.

Curing for Continental markets was carried on at both ports during May and June and at Mallaig right on into late autumn. For June cure high prices were realised, comparing favourably with those obtained by other West Coast ports. There were no direct shipments, all being sent by rail to Leith for the Continent and *via* Glasgow for America. A few small consignments were sent to Liverpool and London, while a considerable quantity was sold for local consumption. The number of barrels cured shows an increase of over 4000.

Great-line fishing was somewhat restricted at Mallaig owing to the success of the herring fishing, many crews who otherwise would have engaged in line fishing electing to participate in the herring fishing as being more remunerative. Consequently the boats engaged working lines were less in number than usual, and there was a corresponding decrease in the landings. Sometimes the congestion at Mallaig was so great that the line boats could only effect a landing during the evening when the herring boats were at sea.

The weather conditions also were exceptionally severe during the first two months, but, despite these adverse circumstances, some fair results were obtained. The usual grounds were exploited, and fish were found in fair quantity. Bait supplies were plentiful and reasonable. In several instances where bait nets were shot, herrings were so plentiful that the crew ran to port without working lines and discharged up to 50 crans. The average earnings would compare favourably with those of the previous

year, those of steamers ranging from £400 to over £700, with an average of fully £500. The best shot realised £89. Motor boats earned from £350 to £380. A feature was the fine landings of hake made by one crew in particular. The best fishing ground for this fish was off Loch Torridon. Prices throughout the season kept a high level, some exceptional figures being realised. Hake made up to £6, 12s. and eels £5, 3s. per score. Very little great-line fishing was done at Oban apart from the local craft, there being no strangers working regularly from the port. Boats on their way from Ireland landed considerable quantities of cod taken on the ripper.

Crews working small lines experienced a year of moderate success at Mallaig, but at most other creeks results were very poor. Landings from trawlers show a large falling off, no vessels having operated from either Mallaig or Oban, and the returns represent a few stray shots too small to warrant the voyage to Aberdeen.

The shell-fish returns show a slight reduction in value.

No classes for the special instruction of fishermen or other persons connected with the fishing industry were conducted during the year in this district.

The barometer at Mallaig continues in good order.

JOHN GLEN,
Fishery Officer.

FISHERY OFFICE,
OBAN, 10*th January* 1914.

Campbeltown District.

During recent years a gradual change has been taking place in connection with the fisheries of this district—particularly those within the Clyde area—and the returns for the year just closed indicate that this change is still going on. Net fishing is now receiving more attention than it did in the past, while line fishing is steadily declining in importance. This is being brought about, principally, by the increasing scarcity of line fish in the waters of the district, but also to some extent by the great advance in the prices now paid for herrings, as compared with those of past years.

In comparing the results for the year under review with those of 1912, the quantity of fish caught by nets shows an increase of 18,482 cwts., while the total catch by lines shows a falling off to the extent of 1557 cwts. There is therefore—exclusive of shell-fish—a nett increase of 16,925 cwts. in the year's catch for the district, while the total value is £15,656 greater than that of the catch of the former year.

Very little change has to be recorded with regard to shell-fish fishing, the year's results being somewhat similar to those of last year. The total value of all kinds of shell-fish landed in the district amounts to £2444, compared with £2702 for 1912.

A considerable reduction in the number of boats is shown by the means of capture returns, but as the majority of the boats which have been struck off the register were small and, in many cases, seldom employed at fishing, the catching power of the fleet has been little affected thereby. Since the close of the year 1912 7 motor boats have been added to the fleet, which increases the number belonging to the district to 79. Of the new additions 4 were built during the year, the other 3 being old boats in which motors were installed. In the course of the year several engines were taken out of the boats, in which they had been in use for some time, and replaced by more powerful ones. A noteworthy feature in connection with the progress which is being made by the fishermen, in utilising motor-power in the

prosecution of the fishing, was the introduction of engines fitted with reverse gear. Three of the new boats that were built for local owners were fitted with such engines, while an old engine was removed from the boat in which it had been previously fitted, and one having reverse gear put in its place. All these engines are of the "Kelvin" type, and are giving complete satisfaction to their owners.

The herring fishing was, as usual, prosecuted by seine nets throughout the whole year by the fishermen of Campbeltown and Carradale, and was attended with a considerable measure of success. In fact, not for many years has this branch of the industry been so prosperous. This was due, to a great extent, to the long periods of favourable weather which prevailed during the year—especially throughout the summer months—the fleet being able, in consequence, to get regularly to sea. Nearly all the herrings were caught in Kilbrannan Sound, and, although it was seldom that the fishings were heavy, the shoals were always found to be on the grounds, and regular supplies were therefore obtained. The best results were got during the months of April, August, September, and October, September being the most successful month of the year.

A few crews fished with drift-nets for several weeks in the early part of the summer, but, as in the past few years, poor success was met with. This method of fishing does not seem to be suitable for the waters of Kilbrannan Sound, and is now seldom adopted.

The herrings caught during the greater part of the year were of splendid quality, and, as there was always a keen demand for them, prices ruled exceptionally high, especially from the beginning of June to the end of the year. The average price per cran for the year's catch is 29s. 9d., as against 24s. 1d. for that of 1912, and 17s. 1d. for 1911. The great advance in prices within the last two years has been brought about by the opening of curing stations at Campbeltown by several curers from other districts. Fishermen, consequently, benefited very much by the increased demand, and, as the catch for the last twelve months was an exceptionally good one, it is evident that they experienced a very remunerative year. Two pairs of skiffs belonging to the district grossed for the year fully £2000 a pair. Most of the other crews also made good earnings, although a few, as is always the case with those engaged in this uncertain calling, were but meagrely rewarded for their efforts.

Curing for exportation was carried on more extensively than in any former year. Operations were commenced early in January, and, although more than half of the quantity cured during the year was dealt with in September, and October, a portion of each month's catch was pickled, and fully 5000 barrels were shipped coastwise to Glasgow.

With regard to line fishing, the past year, as already stated, was a poor one, and the returns of fish caught by this means, when compared with those of the preceding year, show a considerable decrease in the catch at each creek in the district where it is carried on. It is to be regretted that this branch of the industry continues to decline so rapidly, as a number of the older fishermen, who are unable to obtain berths in the herring fleet, have little else to depend on for their livelihood. For a number of years several crews of Portnahaven, and Portwemyss fishermen visited the Mull of Kintyre regularly each summer for the purpose of catching and curing cod and saithe, but owing to the poor success which attended their efforts at this fishing in recent years—especially in 1912—none of them left home during last summer. The cod fishing at Portnahaven was disappointing, and for the first time for some years no cod were cured at the port, all the catch being required for immediate use. The returns from Gigha also show a great decrease in the quantity of cod cured, the figures being 79 cwts. in 1913, against 189 cwts. in 1912. At Campbeltown and Bowmore

fishing with small lines was occasionally tried, but the results were discouraging.

During the year one large herring skiff was built at Campbeltown for a local fisherman.

Fortunately the amount of damage done to boats and fishing gear throughout the district was not great. Two small boats were driven from their moorings during a gale and were not recovered, and 2 herring boats got damaged by coming in contact with rocks while fishing close to the shore. No lives were lost in connection with the fisheries.

All the barometers in the district are being carefully attended to by the various custodians.

JOHN SIM,
Fishery Officer.

FISHERY OFFICE,
CAMPBELTOWN, *7th January* 1914.

Inveraray District.

Another year of disappointing results has to be recorded in connection with the fisheries carried on in this district, but local fishermen fortunately met with very gratifying success when fishing in other districts, and the season, from a financial point of view, was the best experienced by the fishermen for a considerable number of years.

The aggregate returns for this district are mainly dependent on the results of the Loch Fyne herring fishing, and as this again proved unproductive, the total catch of all kinds of fish—shell-fish excepted—amounted to only 14,122 cwts., valued at £5899. These figures no doubt show respective increases of 2234 cwts. in quantity and £2574 in value when compared with those for 1912, but the landings are still very far below those of former years.

A very noticeable feature in connection with the means of capture returns was that the number of motor boats increased by 25 per cent., and it seems probable that in the near future the herring fleet at least will consist entirely of boats with mechanical propelling power.

Taking into consideration the transference of 10 boats from the sail to the motor class, the number of sailing craft on the register at the close of the year showed a net decrease of 18 when compared with the figures for 1912.

The gradual decrease which has been going on for some time in the number of fishermen was again evident, and as a result of this there was a further shrinkage in the area of netting and the length of lines in use.

As already indicated, the results of the Loch Fyne herring fishing were extremely disappointing, and to show the state to which this once lucrative fishing has been reduced, it has only to be stated that the total landings for the year represented little more than the average weekly catch of the prosperous seasons of about thirty years ago. This condition of affairs is also having a serious effect upon the fleet engaged, which during the year was reduced to 88 boats as compared with 97 in 1912. In 1904 Tarbert alone put to sea 84 boats during the herring fishing season, but it must be remembered that the fleet then consisted wholly of sail boats.

Operations commenced rather earlier than usual, a few motor boats being at work during March. It was then evident, however, that few herrings had entered Loch Fyne, and, from that date until the end of June, fishermen confined their operations almost entirely to the waters of

Kilbrannan Sound. With the advent of July prospects slightly improved, and a number of crews returned from Campbeltown district to try the local waters. The improvement was not, however, very pronounced, as the catch for the month amounted to only 850 crans. Operations were continued throughout the month of August, when the landings were rather better; but subsequently little was done, and, with the exception of the older fishermen, all the crews left for Campbeltown and other districts.

The catch for the season amounted to 3056 crans valued at £5048, compared with 2192 crans valued at £2182 in 1912.

The quality of the herrings landed in the early part of the season was mixed, but thereafter it was very good. The demand was very keen, and prices ruled from 10s. to 67s. per cran, the general range being from 30s. to 40s.

At Stranraer in the early part of the year all the fishermen from Inveraray district did well, the earnings of the best fished "pair" being fully £550 for a period of about four weeks, while in Campbeltown district during the summer months, and later at Ayr, the results were again remunerative.

Curing operations were again conducted on a very limited scale. The poor supply of herrings, and the great demand for freshing purposes, left the curers little scope, with the result that the barrels cured numbered only 246. Three-fourths of the quantity cured was dealt with at Ardrishaig and the remainder at Tarbert. All were disposed of in the surrounding district at prices varying from 26s. to 38s. per barrel, the average price being fully 31s.

During the months of July and August mackerel were very plentiful in all parts of Loch Fyne; but as this fishery usually proves unprofitable, there being little demand for this class of fish in the district, little attention was given to its prosecution.

In fact, there were instances when fishermen, finding they had encircled mackerel instead of herrings, allowed the fish to escape.

The quality was, it is true, inferior to that of the previous year, but even with good quality the demand is always very limited. The quantity landed was 2363 cwts. valued at £318, as compared with 3387 cwts. and £642 in 1912.

Prices ranged from 1s. to 6s.—generally from 2s. to 3s.—and the average price was 2s. 8d. per cwt.

With the exception of a few cwts. all were caught with seine nets.

Line fishing is of little importance in this district. Early in the season fewer boats were engaged owing to a number of the regular line fishermen being employed at herring fishing from Stranraer. Notwithstanding this, the season showed slightly better results than during 1912, there being an improvement in the average landings. The catch as usual consisted almost entirely of codlings, which realised from 16s. to 20s. per cwt.

Cod-net fishing was prosecuted by a few crews for two months with less successful results, there being a decrease of about 30 per cent. from the previous year's figures.

The output of oysters showed a slight increase, but the total was insignificant considering the extensive beds and their advantageous position. Little interest appears to be taken in oyster culture in this district, however, and from various causes, natural and otherwise, the stock in the Tarbert beds is being gradually depleted.

The quantity of lobsters landed also showed a falling off, chiefly at the Island of Luing, where the number landed was 15 per cent. less than in the preceding year.

Best results were obtained during the period from June to September.

Boat-builders were employed during the greater part of the year with

new construction and ordinary repairs. Three motor boats were launched, and an order has been placed for another.

Fortunately, no lives were lost in connection with the district fisheries, and damage to netting and other gear, although greater than in 1912, was of little moment.

There were no classes in the district for the technical instruction of fishermen.

The barometer at Tarbert got damaged early in the year and was replaced by a new one by the Meteorological Society.

Daily records were kept and forwarded to London every month.

ROBERT SPINK,
Fishery Officer.

FISHERY OFFICE,
TARBERT, 5*th January* 1914.

Rothesay District.

The total quantity and value of fish landed in Rothesay district during the year 1913 were 18,581 cwts. and £8103 respectively, a shortage of 3780 cwts. and £1473 when compared with the returns for the previous year.

A decrease in the quantity and value of herrings was mainly responsible for the deficiency, although almost every kind of fish contributed to this result.

The only marked improvement was in the quantity of mackerel landed.

The steady annual decline which for some time past has been noticeable in the means of capture returns continued throughout the year under review, and as fishermen appear to be taking less interest in the fisheries, it is apparent that the limit in this direction has not yet been reached.

There were 11 fewer boats on the register at the close of the year, while the number of fishermen decreased by 15.

While other districts were steadily adding to their motor fleets, Rothesay district remained stationary, no motors being fitted into either old or new boats.

During the first quarter of the year, a few crews prosecuting the herring fishing in Loch Striven and the Kyles of Bute landed 411 crans. The herrings were of poor quality, and realised an average price of only 12s. 6d. per cran.

The summer herring fishing commenced, as usual, about the beginning of June, and was carried on with more or less disappointing results until the close of the year. Throughout the season the number of boats engaged fluctuated considerably, and at certain periods only a very limited fleet was at work.

From the middle of June until the end of August the weekly returns compared very favourably with those for the corresponding period in 1912, but the subsequent landings amounted to only 500 crans, and the season finished with a total of 3057 crans valued at £5317, as compared with 4554 crans and £6626 for the previous season.

To the catch, drift-nets contributed 274 crans valued at £748.

The quality of the herrings was generally very satisfactory and the average price realised was 34s. 9d. per cran, compared with 28s. 11d. per cran in 1912.

The number of barrels of herrings cured gutted was very similar to that of the previous year, but the quantity kippered showed a reduction of 20 per cent. Neither is of much importance in this district, however,

and only a small proportion of the catch is annually dealt with in this manner.

Prices for pickled herrings varied from 30s. to 40s. per barrel, and for kippers, 3s. to 3s. 6d. per box. All were cured for the home markets. Dense shoals of mackerel appeared in the district waters during the months of June, July, and August, and the quantity landed was fully 70 per cent. better than in 1912. Owing to the varied quality of, and the meagre demand for, the fish, the value increased by only 8 per cent.

The entire catch was dispatched to the markets in a fresh state.

Within recent years there has been a marked change in connection with the white-fish fisheries of the district.

For some unknown reason, haddocks and whitings appear to have entirely deserted their usual haunts, while other kinds have also become less plentiful, although not to such an appreciable extent.

The total catch was 3856 cwts. of the value of £2187, contrasting unfavourably with the comparatively poor landings of 4782 cwts. valued at £2617 during the preceding year.

As a result of this retrogressive movement, the number of fishermen employed in this branch of the industry is gradually decreasing.

The total value of shell-fish amounted to only £546, to which mussels and unclassified kinds contributed fully 86 per cent. The annual value has for years shown little change, and the fishery is altogether unimportant.

Employment at boat-building was quite up to the average of the past few years. Three second-class boats were built for owners residing outside the limits of the district.

No lives were lost in connection with the district fisheries, and the damage to and loss of fishing gear was insignificant.

The barometers at Lamlash and Loch Ranza were well attended to by their custodians, who kept a daily record of the state of the weather.

ROBERT SPINK,
Fishery Officer.
(*Acting for local officer on sick leave.*)

FISHERY OFFICE,
TARBERT, *6th January* 1914.

Greenock District.

The returns of fish (exclusive of shell-fish) landed in this district during 1913 show an improvement of 5404 cwts. in quantity, and a drop of £548 in value, as compared with the figures for 1912. Net caught fish exhibit increases of 7551 cwts. and £769, while line-caught fish decreased by 1416 cwts. and £1085.

Motor engines of 7–10 horse-power were fitted into four of the district boats during the year. Two of those previously registered were withdrawn from the fishing fleet, thus making a total of eleven motor boats now belonging to the district as against nine in the preceding year.

A considerable number of the sailing boats were struck off the fishing register. A few of these were sold to owners residing in other districts, some were broken up or left on the beach as unfit for further use, while others are not now being used for fishing purposes.

There are four steam fishing vessels (other than trawlers) registered at Glasgow and Greenock, but as these were employed as herring carriers,

and were not engaged in fishing, they are not included in the returns for this year.

Fully three-fourths of the total quantity and value of fish landed was accounted for by the landings of herrings. There was not a single month in the year in which certain quantities were not landed in some part of the district.

The chief fishing season, however, was during the months of September and October, when a shoal of herrings was located in the waters between Ardrossan and Portincross. During that period the total recorded in the returns for this district amounted to 5394 crans, valued at £5729. Although not of such a large size as those caught in certain other parts of the Clyde, the herrings were of fairly good quality and met with a ready sale. The total catch for the year was 6980 crans, valued at £8213, as against 5167 crans and £7661 in 1912.

Fully 2000 cwts. of mackerel, valued at £334, were accounted for in the district returns. These were mostly taken in the herring nets and disposed of in Glasgow and the English markets. Generally speaking the fish were not so large as could have been desired, and it was sometimes difficult to get them disposed of at prices sufficiently remunerative to the fishermen.

As already stated, the results of the line fishing were not so satisfactory as those of the preceding year. The decrease, however, was not attributable to less success on the part of the local fishermen, but rather to the decline in the landings by steam fishing vessels. There was practically no change in the quantity and value of fish caught in local waters, while the landings by steam liners fell off to the extent of 1437 cwts. and £1027. There were only 7 arrivals of steam liners in 1913, as against 14 in 1912.

For the time being at least, trawler owners do not seem to favour Glasgow as a port of landing for their vessels. In 1912, there were 8 arrivals of trawlers, but not a single vessel of this description visited the district in 1913.

The total value of shell-fish was £328 less than in the previous year. This was almost entirely due to the decrease in the output of mussels, the demand for which appeared to have fallen off.

Herring curing was chiefly carried on during the latter half of the year, and the demand in the American markets, for the larger sized herrings especially, was well maintained throughout the season. Kippering was also carried on during the greater part of the year, and, when local supplies were unobtainable, herrings from other parts of Scotland, and from the English, Irish, and Norwegian coasts were utilised for this purpose.

As will be observed from the returns, the exportation of Scottish cured herrings from this district was greater than in the preceding year. These came from the East and West Coasts and Orkney and Shetland, and were shipped chiefly to America and Canada. There was also an increase in the shipments of Irish cured herrings from Glasgow.

The quantity of dried cod, etc., exported *via* Glasgow to Ireland, Spain, and America was slightly less than in the previous year, and the same was also the case in regard to preserved fish sent to America and Australia.

Although not quite up to the preceding year, in so far as the number of packages was concerned, a large volume of business was done in nearly all kinds of fish in Glasgow market. While the market depended mainly on supplies from Aberdeen and Granton, substantial consignments were regularly received from various other parts of the British Isles.

For the first time for some years no steam fishing vessels were built in the district, the building yards having been filled up with much larger work. Three sailing boats, two of which were fitted with motor engines, were built at one of the smaller establishments.

There was an increase in the output of herring barrels, but still the supply was not equal to the local requirements of the trade, and stocks had to be augmented from other districts.

There were no lives lost in connection with the district fisheries, and the loss of and damage to fishing material was of no importance.

Technical classes for the instruction of fishermen were not conducted in this district during the year.

WM. NISBET,
Fishery Officer.

FISHERY OFFICE,
GLASGOW, 9*th January*, 1914.

Ballantrae District.

Notwithstanding a decrease in the total quantity of white fish landed of 12,762 cwts. from the figures for the preceding year, there is an increase in value of £4021. Herrings account for the bulk of the shortage in quantity, but show an advance in value of £2613.

Besides the craft accounted for in Appendix G., No. 1., there were 4 second-class boats added to the register which were constructed in other districts. Two of these were motor boats, and cost £250 each. The other two were sailing craft, costing £60 and £20 respectively. There is little change in the total number of boats, however, a few having been struck off the register as unseaworthy. There is a growing tendency on the part of the fishermen to use larger seine nets, and this accounts for the increased area of this particular kind. This increase, however, is offset by a decrease in the extent of drift netting, and other kinds.

The centre of the winter herring fishing was Loch Ryan, the stations of Ayr, Dunure, Maidens, and Girvan contributing only moderate quantities. For this period the catch was 5585 cwts. less than in the preceding year, while the value was greater by £3498, the average price per cran being 29s. 11d., as against 19s. in the year 1912.

The early summer herring fishing in this district is of little account in any year, and usually the quality of the fish is inferior, especially in April and May. But it matters little in what condition herrings are caught, there is always a certain demand for them. The quantity taken during this period shows a deficiency when compared with the preceding year's figures, and the price per cran is also less, the average paid in 1912 being 27s. 2d., and in the season under review, 25s. 11d. per cran. Poor quality in May accounts for the fall in price.

The great summer and autumn herring fishing also shows a falling off in the quantity landed but a relative increase in value, the value per cran being 43s. 9d., as against 35s. 3d. for the same period in 1912. In the month of August this fishing entirely failed, and the bulk of the Girvan fleet proceeded to Peel, Isle of Man, where, for a few weeks, fair wages were earned.

January was the most successful month in 1912, while February takes first place by a long way this year. The herrings were all sent in a fresh state to centres of distribution such as London and Glasgow.

Seven steam liners and 1 steam vessel working cod nets made Stranraer their headquarters during January, February, and March. Most of the liners made fair earnings, averaging fully £20 per trip, while the cod-net boat was a comparative failure, grossing only £195 for 32 voyages. The liners made 30, 14, 20, 18, 23, 24, and 10 trips respectively, and their

earnings in the same order were £726, £497, £377, £352, £344, £341, and £151. The best shot realised £90.

The best fished vessel was the same as in the previous year. The catch of steam line fish is 1819 cwts. less than the quantity landed in 1912, but, on the other hand, the value shows a deficiency of only £32.

The sail and motor cod-net and great-line fishings show some improvement on the previous year's returns. Cod-net and great-line fishings are carried on concurrently, chiefly during the first quarter of the year, and the crews occasionally change from one mode of capture to the other. If bait can be conveniently got, lines are worked, if not, cod nets are set. If herrings are on the coast the cod-net and line fishings are dropped, and herring nets taken aboard by those fishermen who have them. As a matter of fact several crews who possess both lines and cod nets continued herring fishing during the whole of the year under review.

The small-line or haddock and whiting fishing, which is prosecuted chiefly by the fishermen of Dunure and Maidens, gave results very similar to those of the previous year.

Flounder net fishing exhibits a further slight improvement, while the catch of flat fish by trawling in the Solway shows a decrease. Shrimp trawling, however, was more successful than during 1912.

The output of oysters from Loch Ryan was rather less than in the preceding season, owing it is said to the cold and stormy weather which prevailed from May to July retarding the growth of the fish. The market is now demanding a larger oyster than hitherto. Two and one-third millions of English native oysters were relaid in the loch during the year.

Lobsters and crabs both show a decreased catch, while mussels and unclassified shell-fish show improved returns. The general result is in favour of the year under review to the extent of £369.

Fortunately there is no loss of life to report.

W. M. Wares,
Fishery Officer.

Fishery Office,
Girvan, 9*th January* 1914.

APPENDIX M.

HARBOUR IMPROVEMENT SCHEMES.

REPORT BY MR. R. GORDON NICOL, M.INST.C.E.

I have the honour to submit, for the information of the Board, the following report on the Harbour Improvement Schemes which are being carried out under the supervision of the Board, and were in progress during the year ending 31st March 1914.

The following table gives a list of these harbours, along with the estimated cost of the Schemes and the assistance in grants and loans that is to be provided from funds at the disposal of the Development Commissioners and the Board :—

Name of Harbour.	Estimated Cost of Scheme.	Assistance to be Provided.		
		Free Grants.	Loans.	Total.
Berwick	£11,000	£4,000	£7,000	£11,000
St. Andrews	1,710	1,069	..	1,069
Stonehaven	13,500	6,500	7,000	13,500
Fraserburgh	40,000	20,000	20,000	40,000
Gardenstown	9,500	4,000	4,000	8,000
Macduff	26,488	12,000	12,000	24,000
Banff	4,000	3,000	..	3,000
Whitehills	2,000	1,500	..	1,500
Cullen	6,037	2,300	2,300	4,600
Buckie	35,000	10,000	25,000	35,000
Wick	15,000	..	15,000	15,000
Whitehall (Stronsay)	20,500	10,000	..	10,000
Lerwick	17,000	7,500	..	7,500
Total	£201,735	£81,869	£92,300	£174,169

Berwick Harbour.

This Improvement Scheme consists of a timber wharf 400 feet in length, situated at the south side of the River Tweed, about a mile from the harbour entrance. It is for the accommodation of fishing vessels, and will provide mooring berths, having a depth of 5 feet at low water of ordinary spring tides throughout the length of the wharf.

The scheme was estimated to cost £11,000, towards which a free grant of £4000 and an interest bearing loan of £7000 are to be provided from the Development Fund.

The engineers for the scheme are Messrs. J. Watt Sandeman & Son, Newcastle-on-Tyne, and the contractors are Messrs. Brims & Co., Limited, Newcastle-on-Tyne, the contract price being £8782.

Operations on the site were commenced in February last, and since then the dredging work has been completed, and about one-fourth of the timber piles in the wharf have been driven. It is expected that the whole of the scheme will be completed this year.

St. Andrews Harbour.

The outer harbour basin and entrance channel of this harbour had silted up to such an extent during recent years, owing to the sluice gates becoming inoperative, that fishing vessels had difficulty in entering and leaving the port with safety.

The Improvement Scheme consists in the reconstruction and alteration of the sluicing gateway and the alteration and repair of the sluice gates. The estimated cost of the scheme was £1710, towards which the Board has promised a grant in aid not exceeding three-fourths of the actual cost of the improvement, up to a maximum payment of £1500, the balance to be met by the Harbour Authority.

Messrs. D. & C. Stevenson, Edinburgh, are the engineers for the scheme, and Messrs. John M'Adam & Sons, Glasgow, the contractors, the contract price for the renewal of the gateway being £1085, 18s. 0d., to which has to be added the cost of repairing the sluice gates and winches, estimated at £340, and the engineering fees and cost of supervision.

The work of reconstruction is now in progress, and is expected to be finished this summer, when sluicing operations will be resumed and the accumulation of silt scoured out of the harbour.

Stonehaven Harbour.

This Improvement Scheme is to provide berthing and landing accommodation for fishing vessels in the outer harbour basin by the excavation of rock to give a depth of 6 feet at low water of ordinary spring tides, and strengthening the structure of the Old North Pier to suit the greater depth.

The estimated cost of the Scheme is £13,500, towards which a free grant of £6500 and a free loan of £7000 are to be provided from the Development Fund.

The engineer for the scheme is Mr. James Barron, Aberdeen, and the contractors are Messrs. Kinnear, Moodie, & Co., Glasgow, the contract price being £13,128. In this price is included the sum of £1755 for a partial reconstruction of the Old North Pier.

As the work of excavation proceeded, and the foundations of this old pier were uncovered, it was found necessary for the stability of the structure to go further in the way of reconstruction than originally contemplated, and this has entailed additional cost.

The work of reconstruction is finished, and about two-thirds of the rock excavation completed, towards the cost of which payments amounting to £8500 have been made from the Development Fund.

It is expected that the work will be completed this year.

Fraserburgh Harbour.

A large Improvement Scheme is at present in progress and nearing completion to provide additional accommodation for herring drifters. It is being carried out under a Provisional Order of 1905, empowering the Fraserburgh Harbour Authority to construct a new harbour basin, about 10 acres in area, with enclosing piers and central jetty, excavated to a depth of 11 feet at low water of ordinary spring tides, and a spur or pier on the south-west side of Balaclava Breakwater, and to further strengthen this breakwater.

Statutory powers were also obtained to increase the borrowing powers of the Harbour Commissioners, under the Act of 1878, to £400,000. In terms of the Order the Trustees obtained loans amounting to £95,000 from the Public Works Loan Commissioners, and a free grant of £25,000 from the Treasury.

The engineer for the scheme was Mr. James Abernethy, Westminster, and the work is being carried out departmentally without a contractor, under the superintendence of Mr. John Davies as resident engineer.

The new spur on Balaclava Breakwater is finished, the new station harbour basin is well advanced, and every effort is being made to complete the scheme in time for the approaching fishing season. Latterly the sum available was found to be insufficient to meet the ultimate cost of the scheme, and application was made to the Development Commissioners for further financial assistance, and in October 1913 the Treasury intimated that a free grant of £20,000 and an interest bearing loan of £20,000 would be advanced from the Development Fund. These amounts are being expended on the station jetty, which projects along the centre of the new harbour basin, and on the excavation of a large quantity of rock from the basin.

The free grant of £20,000 has been earned and paid, and the Commissioners are at present promoting a Provisional Order to enable them to obtain the loan.

It is expected that the scheme will be completed and the basin opened for traffic in June this year.

Gardenstown Harbour.

This Improvement Scheme is for the enlargement of the harbour for the accommodation of herring drifters. It consists of an extension of the existing East Pier for a distance of 80 lineal feet, the construction of a new harbour basin having an area of about 4 acres, situated to the west of the existing harbour basin, with entrance from it, the new basin being enclosed by a new west breakwater about 1085 feet in length, a new quay wall at the landward side of the basin about 580 feet in length, and the deepening of the entrance channel and part of the new and old harbour basins to a depth of 5 feet at low water of ordinary spring tides.

The estimated cost of the scheme was £9500, towards which a free grant of £4000 and an interest bearing loan of £4000 are to be provided from the Development Fund.

A Provisional Order was obtained in 1911, empowering the Trustees to carry out the scheme in accordance with the plans and estimate which accompanied their application to Parliament, and two engineers in succession have been employed by the Trustees in the preparation of these plans and estimate, but unfortunately these engineers, through untoward circumstances, had to resign their connection with the scheme, and the present engineers are Messrs. Kyle, Dennison, & Laing, Glasgow.

The contractors are Messrs. R. C. Brebner & Co., Edinburgh, the contract price being £10,457.

Work on the new West Breakwater was commenced in April 1913, and it is partially constructed for a length of about 150 feet, but in July, owing to the unsatisfactory quality of the concrete work of the breakwater, the contractors were ordered by the Trustees to stop operations until an understanding could be arrived at to execute satisfactory work.

The Trustees since then have endeavoured to arrange matters with the contractors for the resumption of operations on a satisfactory basis, but without success, and they now propose to take the work out of the contractors' hands, and complete the scheme departmentally. They have

therefore arranged to proceed with the extension of the East Pier immediately, the work which is most urgently required for the protection of the harbour.

Macduff Harbour.

This Improvement Scheme is to provide additional accommodation for herring drifters by the construction of a new harbour basin about 2·6 acres in area to the east of the existing harbour, with entrance from it. The new basin is to be enclosed by sea walls and quays and excavated to a depth of 11 feet at low water of ordinary spring tides.

The estimated cost of the scheme was originally £24,100, towards which a free grant of £10,000 and an interest bearing loan of £12,000 are to be provided from the Development Fund, and a free grant of £2000 from the funds of the Board.

The engineer is Mr. A. W. Lewis, Westminster, and the work is to be carried out departmentally without the aid of a contractor at a revised estimate of £26,488.

The Board at first favoured the work being carried out by contract, and tenders were obtained for this purpose, but the Harbour Authority from the outset expressed a strong desire to execute the work departmentally, in the same manner as adopted with success in a former scheme, alleging with great insistence that they could carry it out cheaper and better in this way than by contract. Ultimately the Board, after protracted negotiations, agreed to allow the work to be executed departmentally under specific reservations, and the Harbour Authority are now advertising for a resident engineer, to act under the engineer, as superintendent in full charge of the work.

Banff Harbour.

This Improvement Scheme is to increase the floating area in the existing harbour by the removal of an old jetty and excavating the inner basins to a depth of 5 feet at low water of ordinary spring tides.

The estimated cost of the scheme is £4000, towards which the Board has promised a grant in aid not exceeding three-fourths of the actual cost of the improvement, up to a maximum payment of £3000, the balance to be met by the Harbour Authority.

The engineers for the scheme are Messrs. Kyle, Dennison, & Laing, Glasgow, and tenders for the work have not yet been invited pending the approval of the plans by the Board of Trade.

Whitehills Harbour.

This Improvement Scheme is to provide additional berthing accommodation with greater depth of water for fishing vessels within the existing harbour. It consists of a new jetty, 140 feet long, projecting westwards from the east side of the harbour basin, and a new quay wall, 120 feet long, to the south of the jetty, the deepening of part of the basin to the level of low water of ordinary spring tides, and the deepening of a small area at the entrance channel.

The estimated cost of the scheme is £2000, towards which a free grant of three-fourths of the total cost, up to a maximum of £1500, is to be provided by the Board, the balance to be met by the Harbour Authority.

The engineers for the scheme are Messrs. Kyle, Dennison, & Laing,

Glasgow, and the work is being carried out departmentally, without the aid of a contractor.

Work was commenced on the excavations in February last, and about one-half of it is finished, while the construction of the concrete jetty is about to be started. The whole of the scheme is expected to be finished this summer.

Cullen Harbour.

This Improvement Scheme is to provide additional and better accommodation for the fishing vessels at the port. It consists in the erection of a new jetty, about 230 feet long, the removal of the existing stone jetty and certain buildings, the construction of a retaining wall and path along the south-east side of the harbour, an alteration of the West Pier Head, securing this pier with sheet piling, and enlarging and deepening the inner harbour basin to a depth of 8 feet at high water of ordinary spring tides.

The estimated cost of the scheme was £6037, towards which a free grant of £2300 and an interest bearing loan of £2300 are to be provided from the Development Fund.

The engineer is Mr. A. W. Lewis, Westminster, and the contractor is Thomas Munro, Wick, the contract price being £7996.

Operations on the site were commenced in June 1913. The new jetty has been completed for a length of about 170 feet, about one-third of the excavation of the inner basin has been executed, and the construction of the retaining wall is completed for a length of 50 feet. It is expected that the whole of the scheme will be completed this year, but up to the present progress has been very slow.

Buckie Harbour.

This Improvement Scheme is for the enlargement of the harbour to provide a boat shelter for herring drifters. It is an extension of a former scheme which has been in progress for the last three and a half years, and is still under construction, to provide additional accommodation for drifters.

The engineer for both schemes was the late Mr. W. T. Douglass of Westminster, until his lamented decease by drowning in August 1913. The joint-engineers are now Mr. F. Palmer, C.I.E., and Mr. A. W. Lewis, both of Westminster, and the contractors are Messrs. Charles Brand & Sons, Glasgow.

Scheme No. 2 consists of a breakwater, about 950 feet long, in continuation of the breakwater of scheme No. 1, a jetty, about 330 feet long, forming the division between the two schemes, about 1600 lineal feet of quay walls along the south and east foreshores of the bay, the diversion of the Ruthven Burn eastwards, the deepening of the new harbour basin enclosed by these works partly to a depth of 2 feet and partly to 11 feet at low water of ordinary spring tides, and several minor works.

The engineer's estimate of the cost of scheme No. 2, at the time of its inception in 1911, was £35,000, towards which a free grant of £8000 and a free loan of £25,000 are to be provided from the Development Fund, and a free grant of £2000 from the funds of the Board.

The contract price as recently adjusted is £88,154, but this includes the cost of a groyne, embankment, and boat slips, which are additional to the scheme.

The work of construction was commenced in August 1912, and since

then 836 lineal feet of breakwater have been built, the work being carried on simultaneously from each end, so that now only a length of 90 feet at foundation level remains to be built to close the gap at the centre. The Ruthven Burn has been diverted eastward, and now flows to the sea through the breakwater in a concrete conduit. A commencement has been made to the construction of the jetty and the quay walls, but no excavation has been done in the new basin.

It is expected that the whole of the works under scheme No. 2 will be completed next year.

The total expenditure on the scheme to 28th February 1914 is approximately £41,834, towards which an instalment of £4000 has been paid from the Development Fund.

The payment of further instalments only awaits the rectification of certain defects of construction, and damage by storms, which are at present receiving attention.

Wick Harbour.

A new river harbour basin is in course of construction at the outfall of the Water of Wick, with protecting breakwaters and piers to provide additional accommodation for fishing vessels. It is being carried out under a Provisional Order of 1903, empowering the Wick and Pulteney Harbour Authority to construct a new North Breakwater, an extension of the existing South Breakwater, two new piers to enclose and protect the new basin, various quays and retaining walls, including a widening of the North Pier, and deepening part of the new basin and fairway. Statutory powers were also obtained to borrow sums not exceeding in all £150,000, and in terms of the Order the Trustees obtained a loan of £70,000 from the Public Works Loan Commissioners, and a free grant of £20,000 from the Treasury.

The engineer for the scheme is Mr. James Barron, Aberdeen, the contractors are Messrs. L. P. Nott & Co., Westminster, and the contract price is £106,569. The sum available being insufficient to meet the cost of the improvement scheme, the dredging of the basin and fairway, and the westward portion of the North Pier widening were omitted from the contract. Subsequently, in February 1912, a free loan of £15,000 was obtained from the Development Fund to meet the cost of this work, and the first instalment of this loan, amounting to £5000, was paid to the Trustees in May 1912.

The South Pier was extended, the two new River Piers were constructed, the widening of the old North Pier completed for a length of about 600 feet, and a portion of the dredging executed, when, unfortunately, the two new piers, the old South Breakwater, and the old North Pier head sustained serious damage by the severe storms of January and November 1912. The amount expended on the strengthening and repairing of damaged works since 1907 has amounted to about £12,650, but the river piers still require considerable reconstruction and repairs before they are properly secured. The opinion has been advanced that the North Breakwater should have been constructed before the River Piers were built, as these piers were not sufficient in themselves to withstand the heavy seas in Wick Bay When, however, the plans were submitted to the Public Works Loan Board for approval, their engineer considered at the time that this was unnecessary, and the North Breakwater has never been erected.

The severe storms of January 1913 did further damage to the north river pier, demolishing the inner wall and roadway, and causing a breach

in the outer wall near the centre of its length. The breach has been repaired, and apron blocks laid along the sea face of the outer wall to protect its foundations, but nothing has been done to restore the inner wall and roadway, and the pier remains in a critical state, liable to further damage by storms.

Whitehall Harbour (Stronsay).

This Improvement Scheme is to provide additional berthing and landing accommodation for herring drifters, the number of which, fishing from the port, is increasing yearly at a remarkable rate. The scheme consists of extensions of the existing Old Pier and New Pier for lengths of 300 feet and 200 feet respectively, and the dredging of the approach channel to a depth of 10 feet at low water of ordinary spring tides.

The estimated cost of the scheme was £20,500, towards which a free grant of £10,000 was to be provided from the Development Fund.

The engineer for the scheme is Mr. Malcolm Heddle, Kirkwall. When tenders were received for the extension of the piers, it was found that the cost of the scheme would be about £33,000, being £12,500 greater than the estimate. Under these circumstances the Orkney Harbours Commissioners were not prepared to proceed with the extension of the piers unless they could obtain additional financial assistance from the Development Fund, and they submitted the case to the consideration of H.M. Treasury, who recommended them in the first instance to obtain further borrowing powers, or make other arrangements for defraying the greater part of the increased cost of the scheme. Meantime they entered into a contract with Messrs. C. H. Campbell, Ltd., London, to execute the dredging work of the scheme for the sum of £9000, the estimated cost of which was £7500. Towards this a free grant of £4500 was paid from the Development Fund. It now appears that the nature of the material to be dredged was much harder than anticipated, and the contractors are to be paid a further sum of £3170 to complete the dredging work, somewhat modified however. The Commissioners have applied to the Treasury for further assistance towards the payment of the larger contract price, and are at present awaiting the reply.

Lerwick Harbour.

This Improvement Scheme is to provide a new boat harbour alongside the Victoria Pier, for the accommodation of fishing vessels, having an area of about 2 acres and an average depth of about 10 feet at low water of ordinary spring tides.

It is being carried out under a Provisional Order of 1911, empowering the Trustees to construct an extension of Victoria Pier for a length of 100 feet, a new pier 416 feet long enclosing the boat harbour on the south-east side of Victoria Pier, new quays along the foreshore in the vicinity of Victoria Pier, the formation of a slipway, and the dredging of the boat harbour and other areas.

Statutory powers were at the same time obtained to increase the borrowing powers of the Trustees, under the Act of 1877, to £35,000.

The estimated cost of the scheme was £17,000, towards which a free grant of £7500 and an interest bearing loan of £2500 are to be provided from the Development Fund.

The engineer for the scheme is Mr. James Barron, Aberdeen, and the contractors are Messrs. Kinnear, Moodie, & Co., Glasgow, the contract price being £31,401.

As the sum available was found to be insufficient to meet the cost of the scheme, the Trustees applied to the Development Commissioners for further assistance, but without success. They are now in communication with the Public Works Loan Board for a loan to meet the increased cost of the scheme.

The new pier enclosing the new boat harbour has been constructed for a length of about 150 feet, about one-half of the extension of the Victoria Pier has been completed, and the new quays and slipway are finished. The first instalment of the free grant amounting to £2500 has been paid. It is expected that the whole of the scheme will be completed early next year.

R. Gordon Nicol,
Consulting Engineer.

APPENDIX N.

SALMON FISHERIES.

MR. CALDERWOOD'S REPORT.

FISHERY BOARD FOR SCOTLAND,
March 1914.

I have the honour to report upon my inspections, etc., in 1913.

FORTH DISTRICT.

From time to time during the summer I received information of the serious condition of the Forth below Stirling. The pollutions of this, the tidal section of the river, are now very great. The town of Stirling discharges its drainage directly into the river by six outfalls, and no attempt of any kind is made to purify the effluent. This of itself is sufficient to cause gross pollution. The population of Stirlingshire was 160,991 in the census of 1911.

Below Stirling, the Bannock Burn forms, in its lower part, another convenient drain for the discharges of various coal pits, and, similarly, the Raploch Burn, which joins the river on the south side just above Alloa Bridge, comes out perfectly black with coal washings from Cowie and Plean. Coal washings are, I understand, specially difficult to filter, as has already been shown at Plean. Mixed with the coal washings, however, is all the domestic sewage of these populous mining villages. On the north bank the waters of the Devon enter, and these are polluted to an extent which almost defies description. When the tide is out the black mud, impregnated with putrid matter, gives off an odour sufficient to produce acute nausea to one walking along the bank to which the wind blows. I have seen some very foul river beds, but I think I have never seen any stream reduced to a more revolting condition. At Cambus there is a weir giving water to the local distillery, and close to this, at the time of my visit, a pipe was discharging an orange-coloured fluid, which I took to be pot ale. The rapid putrifaction of this complex bi-product is, I expect, largely responsible for the overpowering odour which is given off by the mud below. The tide flows up to this weir, and it is no doubt due to this fact that sea trout and a few salmon are enabled to ascend to the less-polluted river above. Like domestic sewage, pot ale is capable of purification by bacterial methods, the toxic properties of pot ale being fifteen times as great as that of the complex sewage of the city of Manchester.

With an inflowing tide in the Forth, the pollutions of the Devon are carried up the river, just as the pollutions of Stirling are also carried up. With the ebbing tide the accumulation of all sorts of objectionable matter comes down the river, and, especially when the natural flow of the river is small, as in the past dry summer, much of the matter is deposited as fœtid sludge on the banks and river bed. When, with a small river strong

stream tides occur, the poisonous matter is stirred up to the greatest extent, and the salmon and sea trout are subjected to the greatest danger of poisoning. When the river is high, the pollutions are more quickly carried away, but there always is a zone of polluted water moving up and down the Forth estuary. Towards the end of July it seems to have become evident to the net fishermen of the district, that the fish were being seriously sickened, and when the strong tides of the first week of August made themselves felt, the fish died in numbers. On Sunday, 3rd August, it is clear, from inquiries I have made, that great numbers of salmon died.

The Causeway Head Ford, above Stirling, seems to mark the upstream limit of the mortality, and Alloa the downstream limit. Half-dead fish were pulled out at many points, and very considerable numbers seem to have been gathered by all sorts of people in the Alloa neighbourhood.

I visited the district on 12th August, and found that the river watchers had just buried 30. I went down the river from Stirling to Alloa by boat, and had no difficulty in counting in a short time considerably more than 30. One came upon 3, 4, and 5 at a time caught up amongst débris of all kinds in the eddies. The netsmen at their stations reported having found here and there as many as 8 and 9. The reed-covered banks, which I could not examine, frequently stank of decayed fish. Gulls were to be seen in flocks pecking at the carcases. I was not surprised at the freely-expressed views of the netsmen. They had for days found it impossible to catch living fish; valuable salmon were rotting on every hand; their occupation had become a disgusting one, because of the decaying fish entangled in the nets; and, most important of all, their profits had become most seriously reduced.

I know what the stock of salmon taken by the Forth nets usually amounts to, and it is not sufficient to tide over many evil years.

A further consideration has to be mentioned when we think of the future. The City of Glasgow proposes, by Private Bill, to obtain powers to take an additional supply of water from the head waters of the district. Lochs Voil and Doine are to be combined into one sheet of water by means of a dam at the lower end of the latter loch, 45 feet high, and all the available water is to be impounded. If this proposal is carried out, the result, I fear, will seriously affect the river Teith and the whole of the salmon fisheries of the Forth District.

Loch Katrine has already been dealt with in a similar fashion, so that one of the two main channels is already seriously reduced. The present proposal of the City of Glasgow will leave no head tributary of any value to the fisheries, the compensation flow suggested from Loch Voil to the Teith being only 29,000,000 gallons, or one-third of the available amount. A stream formed of 29,000,000 gallons is, in my opinion, so small, that spring fish will, in all probability, not run the Teith or enter Loch Lubnaig as at present.

Further, if the pollutions to which I have referred are not materially reduced before any fresh abstraction of water operates it seems to me the salmon netting will be brought to such a low ebb that one may almost foretell its extinction. Fish may be expected to die every year as they have done during the past summer (1913), for the past summer is simply an object lesson in what will happen with a permanently small water flow.

There is only one suggestion which I can make by way of mitigating the injury to some extent—I fear to a comparatively small extent. One serious factor in the conditions proposed is the almost inevitable absence of floods, which do so much to induce fish to ascend, as well as in the scouring of the river bed, in summer weather. In many districts in Scotland

the value of floods is so highly appreciated that waters which ordinarily run to waste when there is a surplusage are impounded and stored till such time as a flood would be beneficial in the interests of the fishing. Thus, when in summer weather or in a dry spring the river has become unduly low, and the fish stale and off the rise through being long confined in the same pools, the letting down of an artificially-arranged spate is found to have most beneficial results.

In the 26th Annual Report, 1908 (Part II. p. 3), I referred to the Forth District, and the relative water supplies of the Vennacher and Lubnaig branches, showing that the latter has, if anything, the larger rainfall and water supply, and pointing out in the interests of the Leny and Teith, and in view of the great value of preserving and, if possible, improving the conditions which still remain, that it might be possible to raise the level of Loch Lubnaig at the outlet opposite St. Bride's Signal Box on the Callander and Oban Railway, so as to secure an impounded head of water under control of the fishery interests. I pointed out, however, that the difference of level between Loch Voil and Loch Lubnaig was only 9 feet, and that the rise and fall of the latter loch amounted to 6 feet. A greater rise than 6 feet begins to endanger not only the railway line but the village of Strathyre.

Drift Netting.

Drift netting for salmon in Scotland theoretically came to an end with the decision of the House of Lords in the Tay Case (1900)—Duke of Atholl and others against the Glovers Incorporation of Perth. As a matter of fact, however, a more or less imperfect form of drift netting has continued in the estuary of the Forth. This has been referred to repeatedly in the reports I have received from the District Board. It is referred to again this year. The Board have had to keep a steam launch for some years for the special purpose of dealing with the evil. In the inquiry I had occasion to hold in Stirling into the proposal for an alteration of the Rod-Fishing Season, I noticed that the action of water-bailiffs during "the drift netting season" was referred to, and also that "the drift netting" was spoken of as a recognised and regular annual offence. The next day I took occasion to see for myself what this drift netting amounted to. I went to Alloa, and, declining the use of the steam launch as a craft easily recognised at a distance, I went down the river in an ordinary salmon coble. At Dunmore eleven boats were putting off with nets. Each boat was of ordinary rowing-boat type, and carried either two men and a boy or one man and two boys.

The operation of fishing was this :—A boy was put ashore with a light tow-line, and the net was run out at an angle to the beach, or at times almost parallel to the beach. In no case did I see the net shot as a sweep or draught net is shot, in a curve and the end drawn ashore, nor did the tow-boy work along the shore so that the two ends of the net might be approximated. On the other hand, I noticed that when the net was hauled, the boat was backed along the line of the shot, while the net was lifted into the boat as an ordinary drift net is lifted. The tow-line to the shore, therefore, served no useful purpose, and, so far as I could discover, was present only to give some appearance of a sweep net. It would be quite possible, for instance, should a watcher's boat come on the scene, to row the drifting end of the net ashore, and haul the net as in net and coble fishing.

Continuing down the river towards Kincardine, a boat was noticed being rowed across the channel by two men. As we approached, one of

the men stood up and waved his arm. The boat was then rowed away in a wide curve. When we reached the line across the channel first taken by the boat, we came upon a net drifting, and quite unattached in mid stream. We passed over the net, and continued our course in the direction of a number of boats about half a mile lower down and east of the Kincardine Ferry. The two men making the wide curve away from us then returned to their net and lifted it, but their signal to those further down the river was immediately acted upon. Every boat lifted a net (there were about a dozen boats at work), and rowed or sailed back to Kincardine. From one of the boats, I distinctly saw a large salmon taken and carried up the slip. It is more than likely that several of the boats I saw thus at work were rowed by men who had a right to fish for salmon, but none of them had a right to fish in the manner being pursued. Only one of the Kincardine boats, which was working just off the Kincardine beach, made any pretence of legal fishing, by having a tow-line on shore as already described in the case of the Dunmore men. At least six of the boats were fishing where no right of fishing is held by any Kincardine man.

It was abundantly clear, therefore, that drift net fishing for salmon is carried on by a large number of men in this neighbourhood, and that by signals they help one another to avoid detection. The celerity with which the fishermen disappeared was also noteworthy. When I landed at Kincardine not a man from the boats was visible, but I had an excellent opportunity of examining their nets. These were of specially light material and of 10-inch mesh. They were drift nets, and not in any way adapted for use as sweep nets.

This illegal fishing can perhaps be more readily dealt with than the great difficulty of pollution. It will be necessary to deal with it in summary fashion. At present it is another menace to the best interests of the river.

The recommendation of the Forth District Board is that drift netting be now made an offence under the Salmon Acts. The District Board have had in some years to prosecute as many as 32 persons for fishing in this illegal way; they have also had to proceed for breach of interdict, and for assault upon bailiffs while in the exercise of their duty.

Tay.

In the report from the Clerks to the Tay District Fishery Board, under the heading of "Obstructions to the Passage of Fish," it will be noticed that the Board are continuing the operations for the opening up of the Tummel at Dalcroy and Dunalastair, although no very immediate action is contemplated at the latter point.

From inquiries I have been able to make from time to time it certainly appears that a considerable number of fish have been noticed in the summer and autumn of 1913 above the Falls of Tummel.

The prolonged drought in the summer of 1913 reduced the level of the Tummel to such an extent that for several weeks the new Salmon Pass was quite dry. Fortunately, however, when the pass was constructed a few slight alterations were at the same time made on one part of the fall where it had been noticed fish trying to ascend commonly struck themselves. It is only in low-water levels that fish can make any attempt to ascend the fall itself, and therefore it may be fairly concluded that in a very dry season the fall is not so difficult as it used to be, and that more fish are able to ascend by this route, while in higher water conditions the pass comes into use.

It seems to be impossible to find out with certainty how many salmon

were killed by rod, but there is no doubt the sport of salmon fishing in the great stretch of water referred to has received a marked stimulus by the operations of the District Board. Netting for the purpose of destroying pike was also carried on, and during this work I understand 9 salmon were taken, 7 being taken in one haul of the net. Some interesting accounts have also reached me from those who had the opportunity of watching salmon successfully ascending the falls of Tummel. It is satisfactory to learn that, on suitable days, a considerable number of fish are now able to make the ascent.

Creetown Stake Nets.

These certificated engines have existed on their present sites for a great number of years, and from time to time members of the Cree District Fishery Board have expressed the view that the details of the nets, which are carefully related in the terms of the certificates, if not the positions of the nets, have been altered, and that the alteration has been to the prejudice of the salmon fisheries. Accordingly, on 5th August, I inspected each net, noting the exact site, and taking measurements of its various parts. Before doing so, I went over the certificates in the possession of Mr. Henryson Caird of Cassencary, the owner of the nets. In my inspection I was accompanied by Mr. Birrell, the tenant.

I first visited the net with three pockets off the mouth of the Moneypool Burn. Seen from the road, this range of nets appears to extend well across the channel of the Cree. On going across the mud banks to the nets, however, this appearance is found to be quite deceptive. No doubt the channel varies from time to time. It is clear also that the formation of the mud banks is constantly going on with the action of tide and river. The site of the range of nets should not be altered however, and, as a matter of fact, I found that at low tide on the day of my inspection there were 50 to 60 yards of mud flat between the outer end of the range of nets and the commencement of the river channel.

The situation of the net is described in the certificate as follows :—
" To the south of a line drawn due west from the centre of the old bridge
" across the Moneypool Burn or Ferry Burn, near a place marked ' step-
" ping stones,' which centre is now marked by a granite boulder placed
" in the burn, and having the letter ' B ' cut out in the stone—starts
" from a point nearly opposite the ' Big Ferry Thorn,' and extends in a
" south-westerly direction as laid down in red ink on a copy of Sheet 42
" of the Ordnance Survey . . . or as near the situation and direction
" above set forth as the state of the channel permits, provided the net
" is substantially on the same bank or scaur."

The granite boulder referred to was shown me by Mr. Birrell. Owing to the changing of the burn the boulder is now on the right bank, just above the stepping stones. It was found to be much overgrown with grass, but when uncovered was easily identified.

This range of nets seems to occupy its proper site.

With regard to dimensions, I found the length to be 235 yards, or rather less than the length allowed. The height, however, I found to be 15 feet, instead of 12 feet, but, owing to variation of level of the sand and silted mud, this difference may, I think, be considered negligible. With regard to the inner pocket, the only correction necessary was that the ebb arm should be 9 yards, instead of 14½ yards.

In the middle pocket both arms should be 14 yards. I found one 10 and the other 17 yards. In the outer pocket the ebb arm should be 8 yards, and the flood arm 41 yards, including a " runaway." The ebb

arm I found to be no less than 38 yards long, instead of 8; the flood arm only 22 yards, and with no "runaway."

I then proceeded to The Point Net, as it is called, immediately opposite Cassencary House. This net ebbs dry about two hours later than the net just referred to.

The certificate states the situation to be "to the east of the Ferry "Ford, nearly opposite Cassencary House, and extends in a south-westerly "direction as laid down in red ink on a copy of Sheet 42 of the Ordnance "Survey. . . ."

The length is not to exceed 54 yards, and the height 14 feet, the ebb arm 14 yards, and the flood arm 14 yards.

I found the site of the net to be in accordance with the certificate. The length of the cross arm I found to be 198 feet, *i.e.* 66 yards, instead of 54 yards, and also 17 feet high, instead of 14 feet. The flood arm was 31 feet 5 inches, or scarcely 10½ yards, 14 yards being allowed. A noticeable error was present in the ebb arm. This I found to be fully 34 yards, instead of 14 yards. There is only the one pocket in this net.

Bay of Fleet Nets.

I had also occasion to visit the fixed nets in the Bay of Fleet. As I have pointed out in previous reports,* fixed or stake nets are here set for the purpose of catching white fish, or ostensibly for that purpose, and similar nets are set for catching salmon. It is not at all easy to distinguish which class of fish is intended to be taken, though, when such nets are fishing during the salmon close time, one is informed consistently that only white fish are to be taken.

There can be no doubt, however, that the only lawful salmon stake nets in this neighbourhood are those for which certificates were granted by the Solway Commissioners in 1879.

Cally Estate holds a certificate for 1 net, and Ardwall Estate certificates for 4 nets, 2 near Ardwall House, and 2 at Ardwall Island.

The Cally Net I found clearly out of place. The certificate states that this net is at or near the mouth of Boreland Burn, about half-way between Craigmore Point and Carrick Point, that the net is not to exceed 187 yards in length or 12 feet in height. One pocket is allowed, 50 yards in circumference, with an ebb arm of 9 yards and a flood arm of 8 yards.

Instead of being at or near the mouth of the Boreland Burn, I found this net set off Craigmore Point. I stepped the length of the net, and found it 219 steps, instead of 187 yards, the cross arm alone being 205 steps. The flood arm I found to be 40 yards, and the height of the net was at least 15 feet. I have informed both the Cally Estate factor, and the Office of Woods of the errors.

With reference to the Ardwall nets, and first the two nets near Ardwall House, Court of Session decisions declare—

1st. A fixed engine at or near a rock called Craiggibboch *ex adverso* of Ardwall, and extending in a southerly direction. It consists of a range of nets not exceeding 10 feet high and 160 yards long inclusive of (1) a pocket not exceeding 30 yards in circumference, with ebb arm 8 yards. (2) A pocket not exceeding 30 yards in circumference, with ebb arm 8 yards.

I found that this range extended to 216 steps. The measurements of the pockets were within the limits prescribed.

2nd. A stake net to the south of Ardwall House, and extending in a south-easterly direction. A range of nets not exceeding 10 feet

* 28th and 29th Annual Reports. Fishery Board for Scotland. 1909 and 1910.

high, and 340 yards long. Four pockets are allowed, each to have a circumference of 30 yards, an ebb arm of 8 yards, and a flood arm of 20 yards.

This net I found to extend to 356 steps, to be only 7 feet high, and to have only 2 pockets instead of 4.

Owing to the height of the bank upon which the net is set, a greater height than 7 feet would not now be of any service.

With regard to the two Island nets, the certificates refer to

1st. 1 stake net at or near the centre of a rock opposite certain ruins marked on the Ordnance Survey Sheet on the east shore of the Island of Ardwall or Knockbrex. It extends in an easterly direction almost in a line for Knockbrex House. It is a range of nets not exceeding 12 feet high and 70 yards long, inclusive of 1 pocket, not exceeding 30 yards in circumference, with an ebb arm of 10 yards and a flood arm of 8 yards.

This net I found to be within the limits prescribed.

2nd. 1 stake net at or near the Island of Ardwall, starting from a rock about 100 yards from the northern shore, and extending in a northerly direction. It consists of a range of nets not exceeding 12 feet high and 150 yards long. Two pockets are allowed. (1) A pocket not exceeding 30 yards in circumference, with an ebb arm of 10 yards and a flood arm of 8 yards. (2) A pocket not exceeding 30 yards in circumference, with ebb and flood arms of the same dimensions as in (1).

This net I found with only one pocket. The length was approximately correct, as also was the ebb arm. The flood arm, however, was not less than 46 yards, instead of 8, and the height of the net I estimated as varying from 16 feet to 18 feet, instead of 12 feet. A remarkable additional feature was present, quite unprovided for in the certificate, in that from the rock at the northern end of the island an arm was run out in a north-easterly direction for 67 yards.

Pollutions.

I have already referred to the pollutions in the Forth District, but I should like to state generally that in several other rivers, such, for instance, as the Leven at Dumbarton, the Girvan, Doon, Nith, Don, and Tay, complaints are frequent as to injury to the salmon fisheries. Conjoint action seems to be necessary to deal with this matter, and hopes which were for a time raised by the investigations and reports of the Sewage Disposal Commission seem now to have waned.

Pollutions grow slowly, and are frequently not observed as increasing till they have attained serious proportions, and have become so established as to be difficult to combat. There is, of course, the great difficulty that to combat a source of pollution is to combat frequently some important industry, but there is no doubt at all that the interests of salmon fisheries are not sufficiently secured by the existing legislative provisions.

With the great amount of attention which has in recent years been given to systematic purification, the excuse that evils complained of cannot be purified can no longer be considered. At the same time many of our District Fishery Boards are not in a position, financially, to combat so serious a matter. This is so, I imagine, in the case of the Forth Board, for instance. Also, it not infrequently happens that although, by Sec. 55 of the Local Government (Scotland) Act, 1889 (52 & 53 Vict. Chap. 50), power to enforce the Pollution of Rivers Act, 1876, is conferred upon

County Councils, members of County Councils may themselves be offenders or for other reasons find themselves unable to deal with the matter. Also, in practise it is generally found that there is no preventive force in the Pollution of Rivers Act, so far as fishing interests are concerned. It is usually too late to deal with the matter satisfactorily when things are so bad that fish are dying, and are therefore obtainable as proof of pollution.

Carron (West Ross) District.

I am now able to report that a District Fishery Board has been created, for the first time, in order to supervise this district. The Chairman is Baron von Shroder of Attadale, and the Clerk, Mr. Arthur H. Duncan, Solicitor, Dingwall. The Carron has the Kishorn, Balgay and Torridon, and Ewe Districts on its northern borders.

Reports from Districts.

I have received 33 Reports from Clerks of District Fishery Boards and others respecting the season 1913. These are given in as short a form as possible in the Appendix. Particulars as to actual catch, giving numbers of fish, have been supplied in only 6 cases, viz., from the Tweed, Findhorn, Grudie, Coigach (Kirkaig and Kannart), Loch Lomond and Leven, and Girvan District. In a few districts where there is very little netting, or absolutely no netting, rod catches are given, and in several cases where the net catch cannot be given the rod catch is alone available. In the great majority of cases the reply still is that the information cannot be obtained, since the lessees decline to make returns which might influence future rents.

There are one or two districts where, owing to the removal of nets in fresh waters, the improvement of the rod catch has been very marked, and where the increase in the stock of salmon is certainly matter of general interest. When, in 1907, the proprietors of salmon fishing rights in the Deveron bought up the nets, I was able to arrange that a confidential report should be furnished me each season as to the rod catch. The Deveron had sunk to a distinctly low level, before the proprietors decided upon the costly operation referred to, and it is of value to have some record, even if confidential, showing the increase in the catch. I am hopeful that when the stock has become quite satisfactory, as in time it will, there may be no objection to my giving at least the total figures. The Spey has already advanced beyond the present stage of the Deveron in this particular, and I had hoped on this occasion to furnish an interesting series of figures showing the great increase in the general stock of fish. One proprietor in the district has been in the habit of collecting the rod catch, but, having received each return privately, he takes the view that the returns cannot be used for publication. I am not aware that the opinions of the other proprietors and tenants have been sought, and I am aware that some at least have not the slightest objection to my publishing the returns. In the past the misfortune of being unable to produce records of catch has always been connected with the netting interest. This instance shows the same difficulty in connection with the sporting interest. Being quite unable to see any adequate reason why the return should not be available, I greatly regret being unable to produce it, since the value of the return is distinctly of general interest in connection with the increase of the stock of salmon in this district, coupled with the means which have been employed to produce this result. The increase in the value of the fishings is reflected in the increase of the assessable rental, which has risen fully £3000 in three years.

APPENDIX O.

AN ABRIDGED STATEMENT OF REPORTS FROM DISTRICT FISHERY BOARDS AND OTHERS.

REPORT FROM TWEED DISTRICT.

Take of Fish—

1. The number of salmon and grilse :—
   (*a*) By fixed engines in the sea, 4237 (approximately).
   (*b*) By sweep net in tidal or fresh waters, 16,842 (actual).
   (*c*) By rod and line, 2471 (approximately).

   Note.—A considerable number of fish are caught in the open waters of which it is impossible to give an estimate.
2. The catch in relation to that of former years was :—
   (*a*) By fixed engine—Below average.
   (*b*) By sweep net—Below average.
   (*c*) By rod and line—Below average.
3. Expressed as percentages for each month of the season, so as to show the times of greatest run, the figures are :—

	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov
By Fixed Engine	..	..	..	..	26	34	28	14Sept. 12	..	..
By Sweep Net .	2·56	6·18	8·29	9·01	11·61	37·51	12·35	14 days 12·49	..	..
By Rod and Line	7·25	6·85	6·42	10·59	2·50	0·41	0·60	1·26	21·10	43·02

4. Sea trout :—
   (*a*) The number taken was 21,171.
   (*b*) As compared with previous years—Below average.
5. The weight of the heaviest salmon taken during the season was 55 lb. The particulars of time and place of capture are :—On 7th November on Lees Water at Coldstream, by rod and line.

Protection—

1. The assessable rental for 1912–13 was £15,930 7s. 5d.
2. The assessment levied was £3186 1s. 7d.
3. The number of water bailiffs employed was as follows :—9 in July, 9 in August, 19 in September, 38 in October, 52 in November, 54 in December, 51 in January, 31 in February, 21 in March, 16 in April, 16 in May, 9 in June, and 1 engineer all the year.
4. Particulars as to prosecutions instituted are briefly as follow :—Prosecutions were instituted against 148 persons in season 1912–13. Seventy-three persons paid fine or were allowed time to pay, 36 persons were imprisoned, 14 absconded, 12 persons were admonished or acquitted, 6 were put under probation or caution, and proceedings were withdrawn in the case of 7 persons.

   The principal offences were :—Killing salmon by means of illegal nets, cleek and light and rake-hooks, being in illegal possession of salmon and of engines for killing salmon, and assaulting and obstructing bailiffs.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—None.
2. Are the bye-laws observed in every case ?—Bye-laws strictly enforced.
3. Fish passes built or in prospect :—A pass for fresh-water trout has been built at Wells Cauld, on the Rule, to enable trout which are washed over the cauld to return to the lake. The ladder, or pass, is not intended to carry salmon or sea trout.

Pollutions—

1. The existing pollutions are :—Poisonous matters from mills and dyehouses in Selkirk, Peebles, Innerleithen, Walkerburn, Galashiels, Hawick, Jedburgh, and Chirnside ; household sewage from Biggar, West Linton, Eddleston, Melrose, St. Boswells, Kelso, Coldstream, Sprouston, Ancrum, Lilliesleaf, Earlston, Lauder, &c.
2. Remedial measures :—There are settling tanks connected with all the mills in Peebles which intercept the grosser parts of the mill effluent, but not much good. There are purification works connected with the mills in Selkirk, erected about 35 years ago, which are in very bad repair.

   A new system of drainage has been erected in Galashiels, but some of the factories are still unconnected with it. So far as it has gone it is a great improvement.

   In Hawick there are irrigating tanks in a field, but they are not worked satisfactorily.

   A purifying plant has been erected at Chirnside Paper Mills with fair results.

The Salmon Disease—

1. Disease made its appearance, season 1912–13, in the month of November, and reached its height in January.

   The river was free of diseased fish in May.
2. The number of diseased fish taken from the river and destroyed was as follows :—

	Males.	Females.
Kelts	1609	610
Clean	80	44

The Spawning Season—

1. Fish were first noticed spawning on 12th October.
2. The greatest number spawned in December.
3. Spawning ceased in February.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as good.

Smolts—

1. Smolts were noticed to be migrating seawards in April and May.
2. As a smolt year 1913 was good.

REPORT FROM FORTH DISTRICT.

Take of Fish—

1. The catch in relation to that of former years was :—
   (*a*) By fixed engine—Below the average.
   (*b*) By sweep net—Below the average.
   (*c*) By rod and line—Below the average.
2. Sea trout :—
   The number as compared with previous years was below the average.
3. The weight of the heaviest salmon taken during the season was 50¼ lb.
   The particulars of time and place of capture are :—19th May 1913. Elie.

Protection—

1. The assessable rental for 1913 was £3703 16s. 8d.
2. The assessment levied was 4s. per £.
3. The water bailiffs employed are 10 in number and one superintendent.
4. Particulars as to prosecutions instituted are briefly as follow :—Pro-

ceedings were taken against 3 men and convictions followed. The cases consisted of being in possession of unclean salmon and attempting illegally to take salmon.

Obstructions to the Passage of Fish—

During the past year the owners of the dam dyke on the Allan, at Dunblane, have altered and repaired it, with the result that it has proved very difficult, if not impossible, for the fish to ascend the river.

Prior to these alterations and repairs being carried out on the dyke, it was for years in a very dilapidated condition, and the fish had no difficulty in getting over it.

It is believed that the ends of this dyke have been raised and the centre allowed to remain as formerly, with the result that in flood a great body of water is thrown into the centre of the river, and it is too strong for the fish to ascend. At the close of last year large numbers of fish had to be caught at the bottom of the dyke, and returned to the river above the dyke, to enable them to get to the upper reaches of the Allan to spawn. Negotiations are proceeding with the owners of the dyke, with a view to alterations being made thereon, to enable the fish to ascend the river.

Pollutions—

1. The existing pollutions are :—Town sewage, dyeworks, bleach works, gasworks, tanneries, coal pits, and other industrial concerns.
2. Remedial measures :—On the invitation of the Fishery Board, a meeting of representatives from the local authorities interested in the purification of the river, was held at Sirling on 24th October 1913. Representatives were present from the County Councils of Stirling, Perth, and Clackmannan respectively, and the Burgh of Stirling.

The polluted condition of the river was fully discussed, and the various methods that might be adopted to bring about its purification. The Fishery Board strongly pressed the County Council representatives to make a recommendation to their Councils to apply, within certain limits, the provisions of the River Pollution Prevention Act, 1876, to the tidal waters of the Forth, but in view of the opinions expressed by the Medical Officers of Health for Stirling and Clackmannan respectively the Stirling representatives did not see their way to make such a recommendation.

No resolution was adopted at the meeting, but it is understood that the County Council of Stirling have continued a remit to a sub-committee to examine the condition of the river during the months of June, July, and August, and to report regarding its condition in the interests of public health.

The local authorities on the tributaries of the Forth, with the exception of Bridge of Allan, have undertaken to take steps with a view to the purification of their effluents.

The Salmon Disease—

1. Disease made its appearance this year in the month of October.
   The river was free of diseased fish in May 1913.
2. The number of diseased fish taken from the river and destroyed was as follows :—

	Males.	Females.
Kelts	201	55
Clean	20	5

The Spawning Season—

1. Fish were first noticed spawning on 20th October.
2. The greatest number spawned in December.
3. Spawning ceased in February.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as a very bad one, owing to the great scarcity of grilse and the flooded state of the rivers for the whole of the spawning season.

Smolts—

1. Smolts were noticed to be migrating seawards in March.
2. As a smolt year 1913 was about the average.

Reference to any matter of Special Importance—

The Glasgow Corporation have made application to Parliament, by way of Provisional Order, for power to construct a dam at Loch Voil, for the purpose of impounding the waters of Lochs Voil and Doine, and abstracting and diverting into Loch Katrine some forty million gallons daily. They propose to provide some twenty-nine million gallons of compensation water. These powers, if granted, will have a very serious and far-reaching effect on the salmon fishings in the Forth and Teith.

The Forth, in the lower reaches, is in a very polluted condition, and the Fishery Board, with their limited powers, are not in a position to secure the purification of the river to any great extent. It is, therefore, of great importance that the quantity of fresh water brought down by the river should not, if possible, be reduced. Floods are essential to secure the purification of the river, and if the river is deprived of their cleansing power, the consequences are bound to be serious on the fish life in the river.

In the Loch Voil district there is a greater rainfall than in any other part of the Forth district, and if the heavy rainfalls in this district are held up, as they will be, if the powers desired are granted, then the value of the salmon fishings in the Forth will be materially affected, if not wholly destroyed.

REPORT FROM TAY DISTRICT.

Take of Fish—

1. The number of salmon and grilse :—
   (*a*) By fixed engines in the sea } Not available.
   (*b*) By sweep net in tidal or fresh waters }
   (*c*) By rod and line—About 3000 mostly caught in spring.
2. The catch in relation to that of former years was :—
   (*a*) By fixed engine—About average.
   (*b*) By sweep net—Below average.
   (*c*) By rod and line—Above average in spring, below in autumn.
3. Sea trout :—A very poor season.
   (*a*) The number taken was under average.
   (*b*) As compared with previous years—Below a usual season.
4. The weight of the heaviest salmon taken during the season was 51 lb.
   The particulars of time and place of capture are :—By rod and line on Upper Ballathie, on 7th October, by Sir Stuart Coats, Bart.

Protection—

1. The assessable rental for 1913 was £23,584 15s.
2. The assessment levied was £1650 18s. 9d.
3. The water bailiffs employed are 17 in number.
4. Particulars as to prosecutions instituted are briefly as follow :—

Number of cases tried		11
Number of persons involved		22
Fines and expenses paid—persons	7	
Expenses paid—no fine	2	
Imprisoned	7	
Not yet settled	4	
Admonished	1	
Total convicted	21	
Diet deserted	1	—22

During most of the close time between 1912 and 1913 the river maintained an unusually high level, and there were several exceptionally

large floods, and it is thought that this accounts to a great extent for the gratifying diminution of poaching. The river was very seldom in a condition when sick fish (the taking out of which illegally forms the chief offence in the district) could be easily taken.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—No change since last return.
2. Are the bye-laws observed in every case ? Yes, so far as observation shows.
3. Fish passes built or in prospect :—Observations are still being carried out with a view to dealing with the obstructions on the Tummel at Dalcroy Dam and Dunalastair Falls. The negotiations so far show that the riparian proprietors are not likely to offer objection to any scheme that may be recommended by experts. The abnormally low state of the River Tummel during the summer of 1913 has enabled all concerned to obtain information as to the actual formation of the Falls, and the conditions under which fish ascend Dalcroy Dam Dyke and the Falls, which has considerably modified the views of the Board as to the propriety of dealing with Dunalastair Falls in the meantime. But it has been practically resolved to make certain alterations on Dalcroy Dam Dyke which will facilitate the ascent of fish there, and so enable them to reach the Dunalastair Falls above before the water there has fallen to such an extent as to make them impassable.

Pollutions—

1. The existing pollutions are :—No change since last return, but pollution from towns still on the increase.
2. Remedial measures :—No change since last return.

The Salmon Disease—

1. Disease is now always present in the river, and reached its height in January. The river was never free of diseased fish.
2. The number of diseased fish taken from the river and destroyed was fewer than in any year since the start in 1879.

The Spawning Season—

1. Fish were first noticed spawning on 29th October 1912.
2. The greatest number spawned November and December.
3. Spawning ceased about 10th January.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as very satisfactory.

Smolts—

1. Smolts were noticed to be migrating seawards in middle of March.
2. As a smolt year it is difficult to say how matters stood in 1913, as the river was generally very high during April and May.

REPORT FROM SOUTHESK DISTRICT.

Take of Fish—

The weight of the heaviest salmon taken during the season was a number about 40 lb. in weight.

Protection—

1. The assessable rental for 1913 was £3555.
2. The assessment levied was £319 18s. 11d.
3. The water bailiffs employed are 8 in number.
4. Particulars as to prosecutions instituted are briefly as follow :—Three cases involving 5 persons :—The offences consisted of using drag hooks, 1 person ; using a net during the weekly close time, 2 persons ; and having unclean salmon, 2 persons.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect. None.
2. Are the bye-laws observed in every case? Fairly well observed.
3. Fish passes built or in prospect:—None.

Pollutions—

1. The existing pollutions are:—Town and bleachfields of Brechin.
2. Remedial measures:—Five settling tanks erected and used during the past year, but very little improvement effected.

The Salmon Disease—

1. Disease made its appearance this year in the month of November, and reached its height in January.
   The river was free of diseased fish in July.
2. The number of diseased fish taken from the river and destroyed was as follows:—

	Males.	Females.
Kelts, ...	319	638
Clean, ...	..	17

The Spawning Season—

1. Fish were first noticed spawning on 25th October.
2. The greatest number spawned during the last week of December.
3. Spawning ceased about the middle of January.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as one of the best for a number of years.

Smolts—

1. Smolts were noticed to be migrating seawards in April and May.
2. As a smolt year 1913 was an average season.

REPORT FROM NORTH ESK DISTRICT.

Take of Fish—

1. The number of salmon and grilse taken by rod and line in September and October 1913 was 138 salmon and 19 grilse—157 in all.
2. The catch in relation to that of former years was about average.
3. The weight of the heaviest salmon taken during the season was by net, 48 lb., and by rod and line, 40 lb.
   The particulars of time and place of capture are:—By net in August 1913, at Rockhall, and by rod and line in October 1913, on Morphie Water.

Protection—

1. The assessable rental for 1913 was £7597 10s.
2. The assessment levied was 5 per cent.
3. The water bailiffs employed are 12 in number, including superintendent.
4. Particulars as to prosecutions instituted are briefly as follow:—One prosecution of tacksmen of sea fishings, for alleged breach of part of weekly close time. Finding of Court "Not guilty."

Obstructions to the Passage of Fish—

1. No dam dykes disused, built, or in prospect.
2. Bye-laws observed in every case.
3. No fish passes built or in prospect.

Pollutions—

1. The principal existing source of pollution is the effluent from Northesk Distillery (when working), about a mile from the mouth of the river.
2. Remedial measures:—Filtering tanks.

The Salmon Disease—

1. Disease made its appearance this year in the month of December 1912, and reached its height in January 1913.
   The river was free of diseased fish in April and May 1913.
2. The number of diseased fish taken from the river and destroyed was as follows :—

	Males.	Females.
Kelts	129	18
Clean	9	42

The Spawning Season—

1. Fish were first noticed spawning on 19th November 1912.
2. The greatest number spawned during December 1912.
3. Spawning ceased in February 1913.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as fairly good.

Smolts—

1. Smolts were noticed to be migrating seawards in April, May, and June 1913.
2. As a smolt year 1913 was good.

REPORT FROM BERVIE DISTRICT.

Take of Fish—

1. The catch in relation to that of former years was :—
   (*a*) By fixed engine—Salmon above average ; grilse and trout average.
   (*b*) By sweep net—Below average.
   (*c*) By rod and line—Above average.
2. The weight of the heaviest salmon taken during the season was 47 lb.
   The particulars of time and place of capture are :—16th August, in a bag net at Gourdon.

Protection—

1. The assessable rental for 1913 was £1095 13s.
2. The assessment levied was 12½ per cent.
3. The water bailiffs employed are 4 in number.
4. Particulars as to prosecutions instituted are briefly as follow :—Three men warned for being in possession of smolt. Four men reported for being in possession of salmon parr. Three of them paid fines to the Board, and one was prosecuted and fined by the Sheriff £1, with £1 0s. 6d. of expenses. Three lads prosecuted for taking a salmon with a gaff, two being convicted and fined £1 each.

Obstructions to the Passage of Fish—

1. Dam dykes disused.
   One at Upper Mill of Allardyce, and one at Mill of Arbuthnott ; neither of them an obstruction.
2. Are the bye-laws observed in every case ?—Yes.

The Salmon Disease—

1. Disease made its appearance this year in the month of January, and reached its height in February.
   The river was free of diseased fish in April.
2. The number of diseased fish taken from the river and destroyed was 50, all kelts.

The Spawning Season—

1. Fish were first noticed spawning on 3rd November 1912.
2. The greatest number spawned in November and December 1912.

3. Spawning ceased about 18th January.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as having been very good, the river having been in flood from October during the whole of the spawning season, and big salmon were plentiful.

Smolts—

1. Smolts were noticed to be migrating seawards in the months of April, May, and June.
2. As a smolt year 1913 was very good.

REPORT FROM RIVER DEE DISTRICT, ABERDEENSHIRE.

Take of Fish—

1. The number of salmon and grilse :—Impossible to give numbers.
   (*a*) By fixed engines in the sea—Below the average.
   (*b*) By sweep net in tidal or fresh waters—About an average.
   (*c*) By rod and line—In the spring rather above average, but in autumn rather below—on the whole about an average.
2. Sea Trout :—
   (*a*) The number taken was—Impossible to give number.
   (*b*) As compared with previous years considered to be rather below the average.
3. The weight of the heaviest salmon taken during the season was 42 lb.
   The particulars of time and place of capture are :—In August, at the Harbour Commissioners Coast Fishings, near to the estuary, by fixed engine.

Protection—

1. The assessable rental for 1913 was £18,153.
2. The assessment levied was at 5½ per cent. thereon = £998 8s. 4d.
3. The water bailiffs employed are 25 in number.
4. Particulars as to prosecutions instituted are briefly as follow :—There was one prosecution implicating 1 man. It was for taking an unseasonable salmon. He was convicted and fined 2s. 6d. with £1 11s. 6d. of expenses, and failing payment, 7 days imprisonment. He went to prison.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—No dam dykes in the river.
2. Are the bye-laws observed in every case ?—No cause to complain.
3. Fish passes built or in prospect :—None.

Pollutions—

1. The existing pollutions are :—From paper mills at Culter, about 8 miles above river's mouth, but not of a very serious nature in 1913.
2. Remedial measures :—The extent of the pollution has not called for any special action in 1913.

The Salmon Disease—

1. Disease made its appearance this year in the month of November, and reached its height in end of December.
   The river was free of diseased fish practically early in June.
2. The number of diseased fish taken from the river and destroyed was as follows :—

	Males.	Females.
Kelts	450	190
Clean	..	..

The Spawning Season—

1. Fish were first noticed spawning on 6th November.
2. The greatest number spawned in December.
3. Spawning ceased practically about the end of January.

4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as about an average. The low state of the river was, at the time, rather against a good spawning season, as some fish were unable to reach the best spawning streams.

Smolts—

1. Smolts were noticed to be migrating seawards in the end of March.
2. As a smolt year 1913 was about an average—perhaps rather under.

REPORT FROM DON DISTRICT, ABERDEENSHIRE.

Take of Fish—

1. The number of salmon and grilse :—
   (*a*) By fixed engines in the sea—Below the average.
   (*b*) By sweep net in tidal or fresh waters—Slightly above average.
   (*c*) By rod and line—Rather below the average. It is impossible to give the *numbers* of fish caught by each of the above methods.
2. Sea trout :—
   (*a*) The number taken was—Impossible to state number.
   (*b*) As compared with previous years—Rather under the average.
3. The weight of the heaviest salmon taken during the season was 40 lb.
   The particulars of time and place of capture are :—By sweep net at Cruives of Don in August.

Protection—

1. The assessable rental for 1913 was £3593.
2. The assessment levied was at 19 per cent. thereon = £682 13s. 8d.
3. The water bailiffs employed are 15 in number.
4. Particulars as to prosecutions instituted are briefly as follow :—There were 12 prosecutions for breaches of the Salmon Fisheries Act, implicating 18 men, as under. Seven cases implicating 10 men for taking or being in possession of unclean salmon. One case implicating 1 man for using an instrument dragging for salmon. Two cases implicating 2 men for being on the banks of the river in possession of a gaff. One case implicating 2 men for taking fish of the salmon kind by means of baited hooks and lines. One case implicating 3 men for having salmon in their possession during annual close time.

   Two of the above cases were settled out of Court. In the other cases all were convicted, the fines ranging from the amount of the expenses to £5 and expenses, with the alternatives of 7 to 60 days imprisonment. Two paid fines, 8 went to prison, and 6 convictions have not yet been put in force.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—No changes during 1913.
2. Are the bye-laws observed in every case ?—No cause of complaint.
3. Fish passes built or in prospect :—None.

Pollutions—

1. The existing pollutions are :—To a greater or less degree from paper and tweed mills on the lower river, and also to some extent from towns bordering on the river.
2. Remedial measures :—Are being considered with a view to reducing the pollution from mills, &c., to the smallest amount possible.

The Salmon Disease—

1. Disease made its appearance this year in the month of November, and reached its height in January.
   The river was free of diseased fish in end of May practically.
2. The number of diseased fish taken from the river and destroyed was as follows :—

	Males.	Females.
Kelts	310	120
Clean	..	..

The Spawning Season—

1. Fish were first noticed spawning on 15th November.
2. The greatest number spawned end of December.
3. Spawning ceased practically early in February.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as rather below the average. The low state of the river prevented a good many fish from reaching the best spawning grounds.

Smolts—

1. Smolts were noticed to be migrating seawards in the beginning of April.
2. As a smolt year 1913 was about an average—perhaps a little under.

REPORT FROM RIVER YTHAN DISTRICT.

Take of Fish—

1. The number of salmon and grilse :—
   (*a*) By rod and line—About 110 salmon.
2. The catch in relation to that of former years was :—
   (*a*) By fixed engine—About an average.
   (*b*) By sweep net—About an average.
   (*c*) By rod and line—About an average for last 7 years.
3. Sea trout :—
   (*a*) As compared with previous years—Below the average.
4. The weight of the heaviest salmon taken during the season was 51½ lb. (male).
   The particulars of time and place of capture are :—On 29th May at Longhaven Fishings. In a bag net.

Protection—

1. The assessable rental for 1913 was £1384.
2. The assessment levied was £206 5s.
3. The water bailiffs employed are 5 in number during the winter and 1 during the whole year.
4. Particulars as to prosecutions instituted are briefly as follow :—Two prosecutions were instituted involving 3 persons. One was fined £1 10s. with £1 9s. 1d. of expenses. The other 2 were found guilty, liable to expenses amounting to £1 7s. 4d.

Pollutions—

1. The existing pollutions are :—Ellon Burgh sewage.
2. Remedial measures :—None.

The Salmon Disease—

1. Disease made its appearance in the month of December, and reached its height in March.
   The river was free of diseased fish in April.
2. The number of diseased fish taken from the river and destroyed was 192, as follows :—

	Males.	Females.
Kelts	146	45
Clean	..	1

The Spawning Season—

1. Fish were first noticed spawning on 18th November.
2. The greatest number spawned from 1st January to 14th January.
3. Spawning ceased about the end of January.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as a good average.

Smolts—

1. Smolts were noticed to be migrating seawards in April.
2 As a smolt year 1913 was very good.

REPORT FROM UGIE DISTRICT.

Take of Fish—

1. The number of salmon and grilse :—
   (*a*) By fixed engine—Salmon, 1364; heaviest fish, 38 lb.; average, 16 to 17 lb.
   (*b*) By sweep net—Grilse, 1226; sea trout, 696, from 2 to 10 lb.
   (*c*) By rod and line—40 salmon and grilse, and from 1500 to 2000 finnock and sea trout.
2. The take of fish generally throughout the district has been somewhat less than season 1912.
3. Sea trout :—
   (*a*) the number taken was 696 by sweep net.
   (*b*) As compared with previous years, rather heavier.
4. The weight of the heaviest salmon taken during the season was 38 lb.
   The particulars of place of capture are :—By fixed engines at the mouth of the river Ugie.

Protection—

1. The assessable rental for 1913 was £789.
2. The assessment levied was at the rate of $\frac{1}{2}\frac{9}{32}$ per £.
3. The water bailiffs employed are 5 in number—1 regular man, who has the assistance of 4 gamekeepers of Colonel Ferguson of Pitfour, when on their beats.
4. Particulars as to prosecutions instituted are briefly as follow :—None.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—None.
2. Are the bye-laws observed in every case ?—Yes.
3. Fish passes built or in prospect :—None. The existing fish passes afford a free and natural passage to fish at all times.

Pollutions—

The existing pollutions are :—None.

The Salmon Disease—

1. Disease made its appearance in the month of December 1912, and reached its height in January 1913.
   The river was free of diseased fish in May 1913.
2. The number of diseased fish taken from the river and destroyed was 13, all kelts—5 males and 8 females.

The Spawning Season—

1. Fish were first noticed spawning on 28th November 1912.
2. The greatest number spawned from the first week of December 1912 to the end of the month.
3. Spawning ceased in the first week of January 1913.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as very good.

Smolts—

1. Smolts were noticed to be migrating seawards in the beginning of April 1913.
2. As a smolt year 1913 was quite up to the average of former years.

REPORT FROM DEVERON DISTRICT.

Take of Fish—

1. The catch in relation to that of former years was :—
   (*a*) By fixed engine—About the average.
   (*b*) By rod and line—Below the average.

2. Sea trout :—The number of sea trout taken was less than in preceding season.
3. The weight of the heaviest salmon taken during the season was 49 lb.
   The particulars of time and place of capture are :—This fish was killed on October 25th, on the Carnousie water by Mr. Harvey.

Protection—

1. The assessable rental for 1913 was £3559 14s.
2. The assessment levied was £385 12s. 10d. for river protection, and £426 8s. 8d. to repay loan and interest for purchase of cruive dykes.
3. The water bailiffs employed are 10 in number, and superintendent.
4. Particulars as to prosecutions instituted are briefly as follow :—1. Case against George Rae, Huntly, breach of annual close time, fined £1 and expenses £1 1s. 6d. 2. Case against George Barclay and William Morrison, same offence. Barclay fined 5s. with 10s. expenses; Morrison admonished. 3. Case against Henry Findlater, Turriff, same offence. Fined 5s. with 21s. 6d. expenses. All paid. There were reports against other offenders, but the evidence being insufficient to convict no proceedings were taken.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—No alteration.
2. Are the bye-laws observed in every case ?—Yes.
3. Fish passes built or in prospect :—No alteration.

Pollutions—

1. The existing pollutions are :—The sewages from the towns of Huntly, Keith, and Turriff, and the waste from 8 distilleries.
2. Remedial measures :—Representations were made to the County Council of Banff to take steps under the Rivers' Pollution Prevention Act, but as public health was not affected they declined.

The Salmon Disease—

1. Disease made its appearance in the month of November 1912.
   The river was free of diseased fish in May.
2. The number of diseased fish taken from the river and destroyed was as follows :—

	Males.	Females.
Kelts	328	18
Clean	..	4

The Spawning Season—

1. Fish were first noticed spawning on 10th October.
2. The greatest number spawned in November and December.
3. Spawning ceased in middle of January.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as far above the average.

Smolts—

1. Smolts were noticed to be migrating seawards in April and May.
2. As a smolt year 1913 was above the average.

REPORT FROM RIVER SPEY DISTRICT.

Take of Fish—

1. The catch in relation to that of former years was :—
   (*a*) By fixed engine } No means of ascertaining.
   (*b*) By sweep net }
   (*c*) By rod and line—Above the average in middle sections, the rest a good average.

PERCENTAGES OF SALMON AND GRILSE CAUGHT SEASON 1913.

Month.	By Net and Coble.		By Fixed Engine.	
	Salmon.	Grilse.	Salmon.	Grilse.
February 11th to 28th .	6·7	..	3·5	..
March	18·8	..	8·3	..
April	11·7	..	11·2	..
May	17·6	0·4	16·6	0·3
June	14·5	9·7	17·5	14·3
July	17·5	83·0	18·0	69·4
August 1st to 26th . .	13·2	6·9	24·9	16·0
	100·0	100·0	100·0	100·0

2. The weight of the heaviest salmon taken during the season was 40 lb. The particulars of time and place of capture are :—18th August 1913. Sea coast or river mouth estuary by raik net.

Protection—

1. The assessable rental for 1913 was £11,228 15s.
2. The assessment levied was £1403 11s. 10d.
3. The water bailiffs employed are 49 in number, viz. :—1 superintendent, 1 inspector, and 47 bailiffs.
4. Particulars as to prosecutions instituted are briefly as follow :—Two cases, including three persons, were disposed of as follows :—1. Two men fined 10s. each or 5 days' imprisonment. 2. One man fined 20s. 3. A shepherd fined 11s., including expenses, for running a quantity of sheep-dip liquid into a stream, and thus poisoning a number of salmon fry.
5. A boy admonished for killing salmon smolts.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—No change during the year.
2. Are the bye-laws observed in every case ?—Pretty well.
3. Fish passes built or in prospect :—The usual necessary yearly overhauls to several.

Pollutions—

1. The existing pollutions are :—Strictly looked after and kept down. The main source comes from distilleries.
2. Remedial measures :—Various and numerous.

The Salmon Disease—

1. Disease made its appearance this year in the month of October, and reached its height in December 1912.
   The river was free of diseased fish in February 1913.
2. The number of diseased fish taken from the river and destroyed was 81 kelts.

The Spawning Season—

1. Fish were first noticed spawning on 28th September 1912.
2. The greatest number spawned in November 1912.
3. Spawning ceased in February 1913.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as abnormally heavy.

Smolts—

1. Smolts were noticed to be migrating seawards in April, May, and June.
2. As a smolt year 1913 was a good average.

REPORT FROM RIVER LOSSIE DISTRICT.

Take of Fish—

The number of salmon and grilse :—

(*a*) By fixed engines in the sea—Rather poor for whole season.
(*b*) By sweep net in tidal or fresh waters—Poor owing to limited landing ground.
(*c*) By rod and line—No let or rented rod and line salmon fishing ground in district.

Protection—

1. The assessable rental for 1913 was £420.
2. The assessment levied was £106 13s. 9d (contributions from 3 proprietors and equal to amount of the expenses).
3. The water bailiffs employed are 4 in number, superintended by the river Spey district superintendent.
4. Particulars as to prosecutions instituted are briefly as follow :—No case of prosecution during the year.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—No alteration during the year.
2. Are the bye-laws observed in every case ?—Pretty well.
3. Fish passes built or in prospect :—None.

Pollutions—

1. The existing pollutions are :—Improving—at all events not becoming worse.
2. Remedial measures :—Settling tanks and bacterial spraying filters for Elgin City sewerage.

The Salmon Disease—

1. Disease made its appearance this year in the month of November, and reached its height in .
   The river was free of diseased fish in April.
2. The number of diseased fish taken from the river and destroyed was 11 (all kelts).

The Spawning Season—

1. Fish were first noticed spawning on 8th October 1913.
2. The greatest number spawned during November 1913.
3. Spawning ceased, 28th December 1913.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as very good.

Smolts—

1. Smolts were noticed to be migrating seawards in April, May, and June.
2. As a smolt year 1913 was a good average year.

REPORT FROM FINDHORN DISTRICT.

Take of Fish—

1. The number of salmon and grilse :—
   (*a*) By fixed engines in the sea—17,500.
   (*b*) By sweep net in tidal or fresh waters—8085.
   (*c*) By rod and line—About the average.

2. The catch in relation to that of former years was :—
   (*a*) By fixed engine—Above the average.
   (*b*) By sweep net—Above the average.
   (*c*) By rod and line—About the average.
3. Sea trout :—
   (*a*) The number taken was about 5000.
   (*b*) As compared with previous year—Below the average.
4. The weight of the heaviest salmon taken during the season was 40½ lb.
   The particulars of time and place of capture are :—First week in May by bag net at Bessie Station.

Protection—

1. The assessable rental for 1913 was £3847.
2. The assessment levied was £340.
3. The water bailiffs employed are 3 yearly in number ; 12 extra during spawning season.
4. Particulars as to prosecutions instituted are briefly as follow :—There was no prosecution.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—None.
2. Are the bye-laws observed in every case ?—Yes, strictly adhered to.
3. Fish passes built or in prospect :—None.

Pollutions—

There are none.

The Salmon Disease—

1. Disease made its appearance this year in the month of November, and reached its height in December.
   The river was free of diseased fish in January 1914.
2. The number of diseased fish taken from the river and destroyed was 75 males and 21 females (all kelts).

The Spawning Season—

1. Fish were first noticed spawning on 18th October.
2. The greatest number spawned between 25th October and 25th November.
3. Spawning ceased on the upper reaches 27th November, on the lower reaches 15th January 1914.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as very good.

Smolts—

1. Smolts were noticed to be migrating seawards in April, May, and June. By the 20th July the smolts were all out of the river.
2. As a smolt year 1913 was very good—fully up to the avearge.

REPORT FROM NAIRN DISTRICT.

Take of Fish—

1. The number of salmon and grilse :—
   (*a*) By fixed engines in the sea—Above average.
   (*b*) By sweep net in tidal or fresh waters—Average (1800 sea trout).
   (*c*) By rod and line—Below average.
2. Sea trout :—
   (*a*) The number taken was 1800.
   (*b*) As compared with previous years—Average.
3. The weight of the heaviest salmon taken during the season was 40 lb.
   The particulars of time and place of capture are :—At Alton Fishing Station ; month of May.

Protection—

1. The assessable rental for 1913 was £1205 8s.
2. The assessment levied was 1s. 6d. per £.
3. The water bailiffs employed are 2 in number, 1 being permanent, and 1 being employed during close season.
4. Particulars as to prosecutions instituted are briefly as follow :—None.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—None.
2. Are the bye-laws observed in every case ?—Yes.
3. Fish passes built or in prospect :—None.

Pollutions—

None.

The Salmon Disease—

There was no disease.

The Spawning Season—

1. Fish were first noticed spawning on 3rd November.
2. The greatest number spawned between 10th November and 6th December.
3. Spawning ceased middle of January.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as above average. River was running at half flood during spawning season.

Smolts—

1. Smolts were noticed to be migrating seawards about 9th April. Disappeared about 15th June.
2. As a smolt year 1913 was very good.

REPORT FROM NESS DISTRICT.

Take of Fish—

1. The number of salmon and grilse :—
   (*a*) By rod and line—554 salmon, 29 grilse. Loch Ness, Fort-Augustus and Glen Morriston District. Rod and line. River Ness, 98 salmon and grilse.
2. The catch in relation to that of former years was :—
   (*a*) By rod and line on river much below average. Loch Ness above average.

   No numbers can be obtained of salmon caught by fixed nets on the coast, and the above numbers for the Fort-Augustus and Glen Morriston District give an idea of the number of salmon caught on Loch Ness. Glen Urquhart or Foyers catches are not included as no records are reported to be kept.
3. The weight of the heaviest salmon taken during the season was 36 lb.
   The particulars of time and place of capture are :—Caught by rod and line on Loch Ness at Glen Urquhart, in March.

Protection—

1. The assessable rental for 1913 was £3832 10s.
2. The assessment levied was £383 5s.
3. The water bailiffs employed are 3 in number.
4. Particulars as to prosecutions instituted are briefly as follow :—None.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—None.
2. Are the bye-laws observed in every case ?—Yes.

Pollutions—

The existing pollutions are :—None.

The Salmon Disease—

1. Disease made its appearance this year in the month of January, and reached its height in February.
   The river was free of diseased fish in March.
2. The number of diseased fish taken from the river and destroyed was as follows :—

	Males.	Females.
Kelts	13	2
Clean	..	1 grilse

The Spawning Season—

1. Fish were first noticed spawning on 27th October.
2. The greatest number spawned in November.
3. Spawning ceased—Not ceased yet.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as:—This spawning season is rather unsatisfactory on account of the continuous floods. The sea trout were plentiful and spawned in large numbers on the River Ness. The upper rivers have not done so well as former years, but the flooded condition of the rivers prevented the numbers being counted. The salmon on the River Ness do not start spawning until the Christmas week.

Smolts—

1. Smolts were noticed to be migrating seawards in April.
2. As a smolt year 1913 was rather below average.

REPORT FROM CONON FISHERY DISTRICT.

Take of Fish—

1. The number of salmon and grilse :—
   (*a*) By fixed engines in the sea } It is impossible to obtain accurate information from the lessees of salmon fishings.
   (*b*) By sweep net in tidal or fresh waters }
   (*c*) By rod and line—About 700, but precise information not obtained.
2. The catch in relation to that of former years was :—
   (*a*) By fixed engine considerably above the average.
   (*b*) By sweep net an average catch.
   (*c*) By rod and line a record one at Brahan, Coul being considerably above the average, and Fairburn, Craigdarroch, Scatwell, Little Scatwell, and Strathconon, a good average catch.
3. Expressed as percentages for each month of the season, so as to show the times of greatest run, the figures are :—

	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.
By Fixed Engine .	3	7	10	13	17	39	11	..
By Sweep Net .	6	10	12	11	14	35	12	..
By Rod and Line .	5	13	24	15	14	11	10	8

4. Sea trout :—
   (*a*) The number taken was below the average.

5. The weight of the heaviest salmon taken during the seasonwas about 30lb., several being taken at that weight.

The particulars of time and place of capture are :—One taken at the mouth of the Conon in July, and several caught at the bag-net fisheries, situated from the North Sutor to Tarbet Ness, during the months of June and July.

Protection—

1. The assessable rental for 1913 was £3183 10s.
2. The assessment levied was £159 3s. 6d., being at the rate of 1s. per £.
3. The water bailiffs employed are 3 in number—one permanent inspector and 2 temporary watchers.
4. Particulars as to prosecutions instituted are briefly as follow :—Complaint against Alexander Matheson, Little Scatwell, for taking salmon at Meig Falls by means of a cleek. Tried at Dingwall on 19th December 1913, and charge found not proven.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—No dam dykes have been disused, or built, nor are any in prospect.
2. All the bye-laws have been strictly observed.
3. No fish passes have been built, but it is proposed to execute certain operations at the Meig Falls shortly. These will be completed during the year and referred to in next Report.

Pollutions—

None.

The Salmon Disease—

None.

The Spawning Season—

1. Fish were first noticed spawning about the 15th of October.
2. The greatest number spawned between the 6th and 24th November.
3. Spawning ceased about the middle of December.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as above the average.

Smolts—

1. Smolts were noticed to be migrating seawards in the latter end of March.
2. As a smolt year 1913 was a fairly good one.

Changes in Office Bearers of District Board, and Reference to any matter of Special Importance—

The Secretary for Scotland, by order dated 22nd January 1914, has given effect to a petition by the Board making it lawful to fish for and take salmon with rod and line from 26th January to 15th October, both days inclusive, instead of from 11th February to 31st October as formerly.

REPORT FROM ALNESS DISTRICT.

Take of Fish—

1. The catch in relation to that of former years was :—
   (*a*) By fixed engine—No fixed engines.
   (*b*) By sweep net } Numbers not known, but believed to be below the
   (*c*) By rod and line } average.
2. Sea trout :—
   (*a*) The number taken was not known.

(*b*) As compared with previous years, about the average. July was the best month for sea trout. Spring and autumn for finnock.

3. The weight of the heaviest salmon taken during the season was 20½ lb.
   The particulars of time and place of capture are :—10th June 1913, Pool Nesich.

Protection—

1. The assessable rental for 1913 was £473 5s.
2. The assessment levied was 4s. 6d. per £.
3. The water bailiffs employed are 1 permanent bailiff, with 1 or more temporary assistants as may be found necessary. The arrangement with the Moray Firth Salmon Fisheries Company Ld., referred to in the Reports for seasons 1911 and 1912, was not continued during last season.
4. No prosecutions instituted.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—No change as regards obstructions in the Alness River.
2. Are the bye-laws observed in every case ?—Yes, except at Balnagown, where the fish pass is not yet satisfactory.
3. Fish passes built or in prospect :—One fish pass has been constructed in the Balnagown River.

Pollutions—

The existing pollutions are :—There is practically no pollution within the district.

The Salmon Disease—

Only 1 diseased fish seen, in December.

The Spawning Season—

1. Salmon were first noticed spawning about 20th October on the upper reaches. Sea trout were first noticed spawning about 10th October.
2. The greatest number spawned about the first week of December.
3. Spawning ceased about 20th December on the lower reaches.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as much below the average owing to the low state of the river from the long spell of dry weather. During August and September the stock of sea trout was good. The river during the spawning season was flooded.

Smolts—

1. Smolts were noticed to be migrating seawards about the end of April, but most migrated in May.
2. As a smolt year 1913 was considered fair, but it was difficult to form an opinion owing to the flooded state of the river.

REPORT FROM KYLE OF SUTHERLAND DISTRICT.

Take of Fish—

1. No information can be obtained.
2. The catch in relation to that of former years was :—
   (*a*) By fixed engine
   (*b*) By sweep net
   (*c*) By rod and line
   } Above the average.
3. The weight of the heaviest salmon taken during the season was 37 lb.
   The particulars of time and place of capture are :—25th July, at Portmahomack.

Protection—

1. The assessable rental for 1913 was £4520 7s. 6d.
2. The assessment levied was £282 10s. 6d.
3. The water bailiffs employed are 8 in number.
4. Particulars as to prosecutions instituted are briefly as follow:—70 poaching cases on the river Carron—offenders fined.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect:—None.
2. Are the bye-laws observed in every case ?—As far as possible.
3. Fish passes built or in prospect:—None.

Pollutions—

The existing pollutions are:—None.

The Salmon Disease—

1. Disease made its appearance this year in the month of July, and reached its height in December.
   The river was free of diseased fish in March 1913.
2. The number of diseased fish taken from the river and destroyed was as follows:—47 male and 10 female kelts.

The Spawning Season—

1. Fish were first noticed spawning on 15th October.
2. The greatest number spawned in November.
3. Spawning ceased about the end of December.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as above the average.

Smolts—

1. Smolts were noticed to be migrating seawards in May.
2. As a smolt year 1913 was very good.

REPORT FROM COUNTY OF SUTHERLAND—EAST COAST DISTRICT (RIVERS HELMSDALE, BRORA, AND FLEET).

Take of Fish—

1. The number of salmon and grilse:—

	Salmon.	Grilse.	Sea trout.
(*a*) By sweep net in tidal or fresh waters—	654	239	37

   (*b*) By rod and line—2815 salmon, grilse, and trout.
2. The catch in relation to that of former years was:—
   (*a*) By sweep net—Below average.
   (*b*) By rod and line—Above average.
3. Expressed as percentages for each month of the season, so as to show the times of greatest run, the figures are:—

		Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
By Sweep Net	Salmon	..	19	54	15	6	5	1	..
	Grilse	..	..	..	0·5	38	46	15·5	..
	Trout	..	..	..	3	73	8	16	..
By Rod and Line		5	16	11	19	14	18	8	9

4. The weight of the heaviest salmon taken during the season was 32½ lb.
   The particulars of place of capture are:—Caught on No. 4 beat River Helmsdale.

Protection—

1. The assessable rental for 1913 was £2160, but angling mostly let with shootings, and value not fully apportioned.
2. The water bailiffs employed are 4 in number in addition to keepers who assist in watching.

The Spawning Season—

1. Fish were first noticed spawning on 30th October.
2. The greatest number spawned between 10th and 21st November.
3. Spawning ceased about 26th November.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as above the average.

Smolts—

1. Smolts were noticed to be migrating seawards in second week of April.
2. As a smolt year 1913 was about the average.

REPORT FROM COUNTY OF SUTHERLAND—NORTH COAST DISTRICT (RIVERS HALLADALE, NAVER, BORGIE, KINLOCH, AND HOPE).

Take of Fish—

1. The number of Salmon and Grilse :—

	Salmon.	Grilse.	Sea Trout.
(*a*) By fixed engines in the sea . . .	460	1725	13
(*b*) By sweep net in tidal or fresh waters	967	1849	42
(*c*) By rod and line	909	74	483

2. The catch in relation to that of former years was :—
   (*a*) By fixed engine—Below average.
   (*b*) By sweep net—Below average.
   (*c*) By rod and line—Above average.
3. Expressed as percentages for each month of the season, so as to show the times of greatest run, the figures are :—

		Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
By Fixed Engine	Salmon .	..	..	13	25	28	29	5	..
	Grilse .	..	..	..	1	42	55	2	..
	Trout .	..	..	..	23	8	69	..	..
By Sweep Net	Salmon .	..	..	..	34	38	27	1	..
	Grilse .	..	..	..	1	34	64	1	..
	Trout .	..	..	..	14	15	64	7	..
By Rod and Line	Salmon .	2	22	21	32	15	3	1	4
	Grilse .	..	..	..	3	37	48	4	8
	Trout .	..	..	..	1	7	63	21	8

4. The weight of the heaviest salmon taken during the season was 32 lb. The particulars of time and place of capture are :—8th August, in bag net at Bighouse.

Protection—

1. The assessable rental for 1913 was £1505 per Valuation Roll, but angling mostly let with shootings, and not assessed at full value.
2. The water bailiffs employed are 4 in number in addition to keepers who assist in the watching.

The Spawning Season—

1. Fish were first noticed spawning on 11th October.
2. The greatest number spawned between 7th and 16th November.
3. Spawning ceased about 19th December.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as very good—conditions were favourable.

Smolts—

1. Smolts were noticed to be migrating seawards in April and May.
2. As a smolt year 1913 was very good.

REPORT FROM COUNTY OF SUTHERLAND—WEST COAST DISTRICT (RIVERS INCHARD, INVER, AND KIRKAIG).

Take of Fish—

1. The number of salmon and grilse :—

	Salmon.	Grilse.	Trout.
(*a*) By fixed engines in the sea . . .	856	4109	205
(*b*) By rod and line	185	185	232

2. The catch in relation to that of former years was :—
   (*a*) By fixed engine—Below average.
   (*b*) By rod and line—Above average.
3. Expressed as percentages for each month of the season, so as to show the times of greatest run, the figures are :—

		Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
By Fixed Engine	Salmon .	..	..	4	34	31	27	4	..
	Grilse .	..	..	..	1	35	61	3	..
	Trout .	..	..	2	5	26	64	3	..
By Rod and Line	Salmon / Grilse	..	..	..	4	20	33	20	23
	Trout	..	..	..	..	2	38	28	32

4. The weight of the heaviest salmon taken during the season was 38 lb. The particulars of time and place of capture are :—Caught by rod and line on River Kirkaig on 10th September.

Protection—

The assessable rental for 1913 was £960 per Valuation Roll, but angling mostly let with shootings, and not assessed at full value.

The Spawning Season—

1. Fish were first noticed spawning on 10th November.
2. The greatest number spawned between 15th November and 1st December.
3. Spawning ceased 15th December.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as fair. The rivers were flooded during the greater part of the spawning season.

Smolts—

1. Smolts were noticed to be migrating seawards in June.
2. As a smolt year 1913 was fair.

REPORT FROM GRUDIE OR DIONARD DISTRICT.

Take of Fish—

1. The number of salmon and grilse :—
   (*a*) By fixed engines in the sea—50.
   (*b*) By sweep net in tidal or fresh waters—None.
   (*c*) By rod and line—60.
2. The catch in relation to that of former years was :—
   (*a*) By fixed engine—Below average.
   (*b*) By rod and line—Below average.
3. Expressed as percentages for each month of the season, so as to show the times of greatest run, the figures are :—

	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.
By Fixed Engine .	..	..	..	..	40	60	..	..
By Rod and Line .	..	..	..	..	..	32	41	27

4. Sea trout :—
   (*a*) The number taken was 890.
   (*b*) As compared with previous years—Below average.
5. The weight of the heaviest salmon taken during the season was 24 lb.
   The particulars of time and place of capture are :—29th August—River Dionard.

Protection—

No regular bailiffs—ordinary gamekeepers only.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—None.
2. Are the bye-laws observed in every case ?—Yes.
3. Fish passes built or in prospect :—None.

Pollutions—

None.

The Salmon Disease—

None.

The Spawning Season—

1. Fish were first noticed spawning on 1st week of October.
2. The greatest number spawned about end of October.
3. Spawning ceased—Not noticed.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as good.

Smolts—

1. Smolts were noticed to be migrating seawards in first week of April.
2. As a smolt year 1913 was very good.

REPORT FROM COIGACH DISTRICT.

Take of Fish—

1. The number of salmon and grilse :—
   (*a*) By fixed engines in the sea—2000.
   (*b*) By sweep net in tidal or fresh waters—None.
   (*c*) By rod and line—76.

2. The catch in relation to that of former years (above or below average) was :—
   (*a*) By fixed engine—Below average.
   (*b*) By rod and line—Above average.
3. Sea trout :—
   (*a*) The number taken was—346.
4. The weight of the heaviest salmon taken during the season was 28 lb.

REPORT FROM THE BALGAY DISTRICT.

Take of Fish—

1. The catch of salmon and grilse in relation to that of former years was below average.
2. Sea trout :—Near average of former years but of smaller size.
3. The weight of the heaviest salmon taken during the season was about 10 lb. The place of capture was—The River Balgay.

Protection—

1. The assessable rental for 1913 was } All expenses paid by Mr. C. J. Murray
2. The assessment levied was } of Lochcairn and the Earl of Lovelace.
3. The water bailiffs employed are 1 in number with the local gamekeepers.
4. Particulars as to prosecutions instituted are briefly as follow :—None this year.

The Spawning Season—

1. Fish were first noticed spawning on 14th of October (sea trout).
2. The greatest number spawned in October and first half of November.
3. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as very backward—especially with regard to number of salmon in this locality.

REPORT FROM LOCHY DISTRICT.

Take of Fish—

1. The number of salmon and grilse :—
   (*a*) By rod and line—602.
   No netting.
2. The catch showed an increase of 49 on last year's return.
3. Expressed as percentages for each month of the season, so as to show the times of greatest run, the figures are :—

	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.
By Rod and Line .	..	..	5·0	10·6	24·6	17·3	7·5	18·2	16·8

4. Sea Trout :—
   (*a*) The number taken was 651.
   (*b*) As compared with previous year a decrease of 687.
5. The weight of the heaviest salmon taken during the season was 48 lb. The particulars of time and place of capture are :—Captured at Pik Pool on River Lochy, on 9th May 1913, with Eagle fly.

Protection—

1. The assessable rental for 1913 was £2269 10s.
2. The assessment levied was ¾d. per £.
3. The water bailiffs employed were 12 in number.

4. One prosecution against 2 men. One pled guilty, and was fined 30s. with 13s. 3d. of expenses. The other was admonished, and ordered to pay 13s. 3d. of expenses.

Pollutions—

None.

The Spawning Season—

1. Fish were first noticed spawning on 27th October 1913.
2. The greatest number spawned—River too high for observation.
3. Spawning ceased by 27th December 1913.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as very bad, river being high and fish scarce.

Smolts—

River too high to observe when smolts were migrating seawards.

Changes in Office-Bearers of District Board—

Mr. W. B. Mackenzie resigned the position of Clerk to the Lochy District Fishery Board on 7th November 1913, and Mr. Duncan Maclachlan, Inverlochy Estate Office, Fort-William, was appointed Clerk in his place.

REPORT FROM AWE DISTRICT.

Take of Fish—

1. The catch was :—
   (*a*) By fixed engine
   (*b*) By sweep net
   (*c*) By rod and line
   } Above average of former years.
2. Sea trout :—
   (*a*) The number taken was less than in former years.
3. The weight of the heaviest salmon taken during the season was 54 lb.
   The particulars of time and place of capture are :—Caught on upper reaches of river Awe in October.

Protection—

1. The assessable rental for 1913 was £1492 0s. 8d.
2. The assessment levied was £130 11s. 1d.
3. The water bailiffs employed were 1 and assistant in summer months.
4. No prosecutions were instituted.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—None.
2. Are the bye-laws observed in every case ?—Fairly observed.
3. Fish passes built or in prospect :—None.

Pollutions—

The existing pollutions are :—None, except that a complaint has been made that a new sewage tank at Inverawe House has been putting a dirty effluent into the river. This is denied by the owner, and steps are to be taken when he is in residence to have the water analysed. Meantine the owner has been notified to have the matter cisted.

The Salmon Disease—

All rivers in Awe district were free of disease.

The Spawning Season—

1. Fish were first noticed spawning on 24th October.
2. Month when greatest number spawned could not be ascertained owing to high state of rivers.

3. Spawning ceased about end of December.
4. Before spawning season commenced a good show of fish was seen, but owing to the high state of the rivers, the past spawning season cannot be regarded as up to the average of former years.

Smolts—

1. Smolts were noticed to be migrating seawards on 9th April.
2. As a smolt year 1913 was fairly good.

REPORT FROM FEOCHAN OR NELL DISTRICT.

Take of Fish—

1. The catch was :—
   (*a*) By sweep net—About last year's average.
   (*b*) By rod and line—Below last year's average.
2. Sea trout :—
   (*a*) The number taken was less than last year.
3. The weight of the heaviest salmon taken during the season was 25 lb.
   The particulars of time and place of capture are :—Caught by net in Loch Feochan in July.

Protection—

1. The assessable rental for 1913 was £196.
2. The assessment levied was £17 3s.
3. The water bailiffs employed were 1 and assistant in summer months.
4. No prosecutions were instituted.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—One dam dyke on river Nell.
2. Are the bye-laws observed in every case ?—Fairly observed.
3. Fish passes built or in prospect :—One should be built on river Nell.

The Salmon Disease—

No disease.

The Spawning Season—

1. Fish were first noticed spawning on 28th October.
2. Month when greatest number spawned could not be ascertained.
3. Date when spawning ceased could not be ascertained owing to the high state of the rivers, but fish were seen at top of river up to 30 lb.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as not very good.

Smolts—

1. Smolts were noticed to be migrating seawards in April.
2. As a smolt year 1913 was not very good.

REPORT FROM CLYDE AND LEVEN DISTRICT, INCLUDING LOCH LOMOND.

Take of Fish—

1. The number of salmon and grilse :—
   Note :—There are no fixed engines in the district. Estuary netting began June 16, and terminated August 4, netting being conducted on 34 days, Saturday being added as well as Monday to the weekly close time.
   (*a*) By sweep net in tidal waters—(1) 275 salmon and grilse ; (2) 1754 sea trout.
   (*b*) By rod and line—(approximately)—in Loch Lomond, exclusive of tributary streams—(1) 152 salmon and grilse ; (2) 668 sea trout.

Taking the figures of rod-caught salmon and grilse in Loch Lomond for the last ten years, the first quinquennial period, 1904–8, shows 308 fish (average 61 per season); the second, 1909–13, shows 638 fish (average 127 per season).

2. The catch in relation to that of former years was :—
   (*a*) By sweep net—Below the average.
   (*b*) By rod and line—Salmon above, grilse below, the average; sea trout, average.
3. Expressed as percentages for each month of the season, so as to show the times of greatest run, the figures are :—

		Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.
*By Sweep Net	Salmon and Grilse	..	..	..	..	16	84	..	..	..
	Sea Trout	..	..	..	..	13	75	12	..	..
By Rod and Line	Salmon and Grilse	½	..	5	32	22	12	7	10½	11
	Sea Trout	..	¼	1	5	6	18	23	25½	21¼

* The netting is for so short a period and so intermittent that figures are worthless.

4. Sea trout :—The number taken was (1) in the estuary nets, below, and (2) by rod and line in Loch Lomond about the general average of previous years. But although there was apparently a short crop of sea trout, the yield to the rod would have been much higher had there not been a period of drought and consistent calms lasting from mid-June to mid-October. The rod yield in this district is, as regards sea trout, never a fair indication of the stock of fish. The quality of the fish got was poor, many being obviously ill-nourished, in marked contrast to the salmon, which were exceptionally good.
5. The weight of the heaviest salmon taken during the season was 27½ lb. It was caught in Loch Lomond on trolling tackle on April 22.

Protection—

1. The water bailiffs employed vary in number, the system having been described in former reports.
2. Particulars as to prosecutions instituted are briefly as follows :—There was an unfortunate recrudescence of poaching on the river Leven, wholly attributable to pollution, which was intensified by a protracted period of drought in mid-summer when the heaviest run of grilse and sea trout normally occurs. As many as 36 cases were brought into court, all for the illegal gaffing of the sickened fish, and at Dumbarton in all the cases convictions were obtained. A case of illegal fishing with rake hooks was detected on the river Endrick at the Pot of Gartness, and the two offenders were prosecuted and convicted at Stirling. Were it not for the temptations offered by the sick fish in the polluted Leven, the absence of poaching would be a marked feature of the whole Clyde and Leven district.

Obstructions to the Passage of Fish—

The attention of the Inspector may be called to the practice of certain of the works on the Leven of extending an arm of wood into the main channel of the river in low water to divert the stream (apparently) into the mouth of the intakes of the lades. The effect must be to alter to some extent the natural flow of water to the prejudice of ascending fish.

Pollutions—

1. The existing pollutions are numerous and gross, and are as described in former Reports. The protracted drought of mid-summer so intensified the pollution of the Leven that thousands of fish must have perished as countless numbers were seen sickened, and many were illegally gaffed by riverside loafers, while hundreds were seen dead. It is believed that until the state of the river is very materially altered for the better it will be hopeless to expect any real increase in the sea trout stock. The water bailiffs and anglers report that there is now no fish life indigenous to the river (as apart from migratory fish) between the uppermost work and Dumbarton.
2. Remedial measures :—It was suggested in last Report that an inspection should be made of certain new settling tanks which had been constructed in connection with Dalmonach Works on the Leven. The value of such an inspection, had it been undertaken, becomes apparent in view of the fact that these tanks had never been in operation through some defect in construction. The officials of the Calico Printers' Association, the owners, at the head offices in Manchester, have undertaken that the defects be remedied, but it is again suggested that these new works be officially inspected.

   On the whole question of Leven pollution, which a dry season proves to be of the most injurious character, it is suggested that the Fishery Board confer with the two local authorities in the district, namely, the County Council of Dumbarton and the Burgh of Dumbarton, both of which are alive to the facts. It must be a matter for the Fishery Board, in consultation with the Secretary for Scotland, to determine how far the inaction of the local authorities is due to the fact that each pollutes the river by domestic sewage within its area, the Burgh of Dumbarton especially, in this respect, being a gross offender. Evidence of their callous neglect of the river is fully disclosed in the proceedings before a Parliamentary Committee in 1906, when the Burgh promoted and did not obtain sanction for a water works scheme at Loch Sloy.
3. The Corporation of Glasgow is still proceeding with the purification of the Clyde, and the Corporation officials will doubtless be able and willing to supply the Board with the facts regarding recent progress made.

The Salmon Disease—

The Salmon Disease was non-existent in the district in season 1913.

The Spawning Season—

1. Sea trout were first noticed spawning on 8th October, salmon early in November.
2. The greatest number spawned—Sea trout, in November, salmon in December.
3. Spawning ceased in January.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as good.

Smolts—

1. Smolts were noticed to be migrating seawards in March.
2. As a smolt year 1913 was average.

Reference to any matter of Special Importance—

1. The work at Luss Hatchery is still being conducted with, it is believed appreciably good results. In spring there were hatched out 135,000 salmon and 110,000 sea trout ova and the resulting fry, with a minute percentage of loss, were distributed throughout the streams of the district. In autumn there were collected 100,000 salmon and 180,000 mixed trout and sea trout ova. Special information regarding the sea trout handled and stripped has been sent to the Inspector.
2. Particulars of salmon and sea trout marked have been sent to the Inspector.

REPORT FROM AYR DISTRICT.

Take of Fish—

1. The number of salmon and grilse :—
   (*a*) By fixed engines in the sea—None.
   (*b*) By sweep net in tidal or fresh waters—None.
   (*c*) By rod and line—101.
2. The catch in relation to that of former years was below the average.
3. The weight of the heaviest salmon taken during the season was 26½ lb.
   The particulars of time and place of capture are :—August 1913, in Ayr Town Council Water.
   The first salmon seen running was on 26th April.
   The biggest runs of salmon were in May and the last week of November.
   The biggest runs of grilse and sea trout were in May and June.

Protection—

1. The assessable rental for 1913 was £447 5s.
2. The assessment levied was 7s. 6d. per £, which should have yielded £167 14s. 5d. ; and the assessments actually received were £163 0s. 4d.
3. The water bailiffs employed are 2 in number permanently, and 1 temporarily (in autumn).
4. Two prosecutions were instituted. In one the accused was found guilty and fined 5s. In the other proceedings were abandoned on accused paying 30s., and giving a written undertaking not to repeat the offence.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—None.
2. Are the bye-laws observed in every case ?—Yes, with the exception of the hecks. There is some trouble occasionally with the millers, who claim a right to keep hecks open for several months in winter when leaves are coming down. Meantime these are all kept closed ; and it is proposed to take steps to compel the observance of the bye-laws next year, if there is any trouble.
3. Fish passes built or in prospect :—None.

Pollutions—

The existing pollutions are :—Dross washings from coal pits, preventing the fish from rising, but not injurious to their health.

The Salmon Disease—

None.
The deaths from natural causes were :—11 males, and 6 females.

The Spawning Season—

1. Fish were first noticed spawning on 17th November 1912.
2. The greatest number spawned in the last week of December 1912.
3. Spawning ceased in the second week of January 1913.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as fairly good.

Smolts—

1. Smolts were noticed to be migrating seawards in May and June 1913.
2. As a smolt year 1913 was average.

REPORT FROM DOON DISTRICT.

Take of Fish—

1. The number of salmon and grilse taken from the lower beat, *i.e.* from the mouth of the river to Cassillis Gate, was :—
   (*a*) By fixed engines in the sea—None.

(*b*) By sweep net in tidal or fresh waters—40 (at Craigengillan).
(*c*) By rod and line—Fully 180.

2. The catch in relation to that of former years was below the average. Most of the fish were killed in September.
3. Sea trout were very scarce.
4. The weight of the heaviest salmon taken during the season was 23 lb. The fish was caught at Monkwood.

Protection—

1. The assessable rental for 1913 was £502.
2. The assessment levied was 8s. 6d. per £, which should have yielded £213 7s. The assessments actually received, including arrears, were £214 3s. 9d.
3. The water bailiffs employed are 2 in number permanently, and 1 temporarily (in autumn).
4. Two prosecutions were instituted, but both were abandoned.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—None.
2. Are the bye-laws observed in every case ?—Yes, with the exception of the hecks. There is some trouble occasionally with the millers, who claim a right to keep hecks open for several months in winter when leaves are coming down. Meantime these are all kept closed ; and it is proposed to take steps to compel the observance of the bye-laws next year, if there is any trouble.
3. Fish passes built or in prospect :—None.

Pollutions—

The existing pollutions are :—There is no pollution supposed to be injurious to health, but pollution which is supposed to prevent the fish rising to fly. The old pollution from Skeldon Mill continues, but one of the bailiffs has a key, and lets this out when river in high flood only. Counsel's opinion was taken regarding the Skeldon pollution, but it hardly justifies strong action being taken. An attempt is, however, being made to get the mill-owners to assist the Board to have things improved.

The Salmon Disease—

There was no disease.

The Spawning Season—

1. Fish were first noticed spawning in November.
2. The greatest number spawned in December.
3. Spawning ceased in December.
4. There were few spawning fish. The water was very low.

Smolts—

Smolts were noticed to be migrating seawards mostly in June.

REPORT FROM GIRVAN DISTRICT.

Take of Fish—

1. The number of salmon and grilse was :—
   (*a*) By fixed engines in the sea—About 750 salmon—430 grilse and 250 sea trout (reported by lessees).
   (*b*) By rod and line—44 salmon and 67 sea trout.
2. Sea trout :—
   (*a*) The number taken was about 250 by fixed engine, and 67 by rod.
   (*b*) As compared with previous years a poor trout year.
3. The weight of the heaviest salmon taken during the season was 41½ lb. The particulars of method and place of capture are :—In a bag net in July.

Protection—

1. The assessable rental was £543 10s.
2. The assessment levied was £27 3s. 6d.
3. One water bailiff is employed during spawning season only.
4. Particulars as to prosecutions instituted are briefly as follow :—None.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—None.
2. Are the bye-laws observed in every case ?—Yes, except that some of the hecks do not yet comply with the statutory requirements.
3. Fish passes built or in prospect :—None.

Pollutions—

The existing pollutions are :—Pollution from water oozing from disused pits at Dailly continues, but does not seem to be so noxious as in former years.

Discoloured water also continues to reach the river from the pumping operations of the working collieries, but there seems to be no remedy at law for this. The new sewage works at Maybole are now completed and in operation, and appear to be effective.

The Salmon Disease—

None.

The Spawning Season—

1. Fish were first noticed spawning on 16th November.
2. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as below average so far as observations go, but it was not a good season for watching the redds owing to floods.

Smolts—

1. Smolts were noticed to be migrating seawards in April.
2. As a smolt year 1913 appeared to be average, but no definite observations were taken.

REPORT FROM STRICHEN DISTRICT.

Take of Fish—

1. Sea trout :—
   As compared with previous years, very poor year.
2. The weight of the heaviest salmon taken during the season was 33 lb.
   The particulars of place of capture are :—Kirkholm Water. Colinmill.

Protection—

1. The assessable rental for 1913 was £400.
2. The assessment levied was £16.
3. One water bailiff employed.

The Salmon Disease—

Disease made its appearance this year in the month of August.
The river was free of diseased fish in November.

The Spawning Season—

1. Fish were first noticed spawning on 20th November.
2. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as not good, owing to heavy floods and deficiency in number of fish.

Smolts—

1. Smolts were noticed to be migrating seawards in May.
2. As a smolt year 1913 was good.

REPORT FROM CREE DISTRICT.

Take of Fish—

1. The catch in relation to that of former years was :—
   (*a*) By fixed engine—Below average.
   (*b*) By sweep net—None.
   (*c*) By rod and line—Fair average.
2. Sea trout :—Very poor.
3. The weight of the heaviest salmon taken during the season was 25 lb. by rod. By net unknown.
   The particulars of time and place of capture are :—Cunningham's Ford, Cree, some time in May.

Protection—

1. The assessable rental for 1913 was £882 10s.
2. The assessment levied was at 8d. per £ = £29 8s. 4d.
3. The water bailiffs employed are 3 in number.
   The District Board only pay the half wage of one man, and the proprietors the remainder.
4. Particulars as to prosecutions instituted are briefly as follow :—None by Board.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—None.
2. Are the bye-laws observed in every case ?—Yes.
3. Fish passes built or in prospect :—None.

Pollutions—

The existing pollutions are :—None.

The Salmon Disease—

No diseased fish seen.

The Spawning Season—

1. Fish were first noticed spawning in beginning of November.
2. The greatest number spawned in November.
3. Spawning ceased—Not known.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as good.

Smolts—

1. Smolts were noticed to be migrating seawards in middle of May.
2. As a smolt year 1913 was fairly good.

REPORT FROM NITH DISTRICT.

Take of Fish—

1. The number of salmon and grilse :—
   (*a*) By fixed engines in the sea—Cannot be ascertained.
   (*b*) By sweep net in tidal or fresh waters—Under last year's average.
   (*c*) By rod and line—Under last year's average. So far as known 35 salmon and 15 grilse.
2. Sea trout :—
   (*a*) The number taken cannot be ascertained.
   (*b*) As compared with previous years below the average.
3. The weight of the heaviest salmon taken during the season was 32½ lb.
   The particulars of time and place of capture are :—On 31st October by rod and line on Blackwood Water, Auldgirth.

Protection—

1. The assessable rental for 1913–14 was £552 12s. 8d.
2. The assessment levied was 5s. in the pound, £138 8d.
3. The water bailiffs employed are 1 in number, with about 20 gamekeepers sworn in as special watchers.
4. Particulars as to prosecutions instituted are briefly as follow:—During the year 3 persons were convicted for contraventions of different sections of the Salmon Fisheries Act, and fines imposed varying from £2 10s. to £3, or 14 days' imprisonment.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect:—Nil.
2. Are the bye-laws observed in every case ?—Yes.
3. Fish passes built or in prospect:—None.

Pollutions—

1. The existing pollutions are:—The effluents from the mills at Dumfries containing dye still unconnected with the sewage system.
   Also coal washings in the upper reaches of the River Nith from coal pits in Dumfriesshire and Ayrshire.
2. Remedial measures:—Nil.

The Salmon Disease—

None.

The Spawning Season—

1. Fish were first noticed spawning on 20th December.
2. The greatest number spawned January and February.
3. Spawning ceased middle of March.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as very good.

Smolts—

1. Smolts were noticed to be migrating seawards in April and May.
2. As a smolt year 1913 was very good.

REPORT FROM ANNAN DISTRICT.

Take of Fish—

1. The number of salmon and grilse was:—
   (*a*) By fixed engines in the sea—Salmon about average, grilse much under average of the last 10 years.
   (*b*) By sweep net in tidal or fresh waters—No sweep net fishing in tidal or fresh waters.
   (*c*) By rod and line—Below the average.
2. Sea trout:—
   (*a*) The number taken by fixed engine was less than 35 per cent. of the average of the 10 years 1904–13.
3. The weight of the heaviest salmon taken during the season was 41 lb.
   The particulars of time and place of capture are:—In a fixed engine at Newbie Fishery in August 1913.

Protection—

1. The assessable rental for 1913 was £3027 10s.
2. The assessment levied was 4s. per £.
3. The water bailiffs employed are 4 in number.
4. Particulars as to prosecutions instituted are briefly as follow:—There were no prosecutions for illegal fishing on the Scotch side of the Solway Firth in 1913.

Obstructions to the Passage of Fish—

1. Dam dykes disused, built, or in prospect :—None.
2. The bye-laws are observed.
3. The following cauls are in this District :—Annan, Blacketlees, Brydekirk, Murraythwaite, in the River Annan, and Brocklerigg and Castlemilk Mill, in the River Milk. All of them are so constructed that they do not obstruct the passage of fish.

Pollutions—

1. The existing pollutions are :—None.
2. Remedial measures :—None.

The Salmon Disease—

1. Disease made its appearance this year in the month of January, and reached its height about the end of February.
   The river was free of diseased fish in the beginning of May.
2. The number of diseased fish taken from the river and destroyed was as follows :—Males, 23 ; females, 14—all kelts.

The Spawning Season—

1. Fish were first noticed spawning on 6th January 1913.
2. The greatest number spawned in January.
3. Spawning ceased on 8th March.
4. As regards numbers of breeding fish, and state of the water, the past spawning season is regarded as good.
   A large number of breeding fish passed upstream from the commencement of the close season till the New Year. As the river kept high, they could not be seen locally in the spawning beds.

Smolts—

1. Smolts were noticed to be migrating seawards in the first week of May.
2. As a smolt year 1913 was fair.

Changes in Office-Bearers of District Board—

J. C. R. Macdonald, W.S., 84 Irish Street, Dumfries, appointed clerk to the Board in succession to John F. Cormack, now deceased.

APPENDIX P.

RATEABLE VALUE OF SALMON FISHERIES, IN DISTRICTS WHERE BOARDS HAVE BEEN FORMED, FOR THE YEARS 1881 TO 1913 INCLUSIVE.

Year.	Alness.		Annan.		Awe.		Ayr.		Balgay.		Bervie.		Conon.		Cree.		Dee (Aberdeen).		Dee (Solway).	
	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.
	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
Average for 5 years, 1881 to 1885	..	..	..	**1,729**	..	..	..	..	..	..	..	..	..	..	..	**546**	..	**10,127**	..	**1,201**
Average for 5 years, 1886 to 1890	..	..	..	**2,022**	..	..	..	..	..	..	..	..	..	..	..	**532**	..	**11,773**	..	**1,568**
1891	..	..	2,112	..	701	..	..	..	40	..	586	..	2,560	..	530	..	11,968	..	1,463	..
1892	..	..	2,099	..	718	..	..	..	40	..	586	..	2,756	..	530	..	12,336	..	1,463	..
1893	..	..	2,165	..	723	..	..	..	40	..	586	..	2,975	..	544	..	13,911	..	1,463	..
1894	579	..	2,778	..	723	..	..	..	40	..	536	..	2,944	..	554	..	14,489	..	1,463	..
1895	584	..	2,793	**2,389**	896	**752**	..	..	20	**36**	536	**566**	2,540	**2,755**	554	**542**	14,593	**13,461**	1,633	**1,497**
1896	584	..	3,182	..	896	..	..	..	20	..	1,071	..	2,455	..	571	..	15,820	..	1,603	..
1897	614	..	3,182	..	878	..	..	..	20	..	1,071	..	2,590	..	571	..	16,176	..	1,633	..
1898	608	..	3,182	..	878	..	100	..	20	..	871	..	2,554	..	696	..	17,468	..	1,603	..
1899	609	..	3,182	..	870	..	110	..	42	..	871	..	2,554	..	696	..	17,427	..	1,603	..
1900	610	**605**	3,182	**3,182**	870	**878**	110	..	20	**24**	871	**951**	2,504	**2,521**	696	**646**	18,989	**17,176**	1,603	**1,609**
1901	606	..	3,196	..	936	..	110	..	20	..	910	..	3,142	..	696	..	19,419	..	1,596	..
1902	601	..	3,197	..	936	..	110	..	20	..	910	..	3,141	..	696	..	19,455	..	1,557	..
1903	617	..	3,197	..	1,052	..	110	..	40	..	910	..	3,108	..	691	..	18,393	..	1,556	..
1904	617	..	3,197	..	1,129	..	110	..	40	..	911	..	2,975	..	695	..	19,079	..	1,556	..
1905	735	**635**	3,256	**3,209**	1,208	**1,052**	110	**110**	40	**32**	911	**910**	3,047	**3,082**	728	**700**	19,333	**19,133**	1,570	**1,553**
1906	531	..	3,006	..	1,306	..	110	..	40	..	911	..	3,047	..	868	..	19,068	..	1,570	..
1907	455	..	2,947	..	1,467	..	125	..	40	..	911	..	3,000	..	933	..	18,899	..	1,231	..
1908	451	..	2,917	..	1,564	..	160	..	40	..	1,096	..	2,968	..	863	..	18,336	..	1,231	..
1909	451	..	2,917	..	1,481	..	125	..	40	..	1,096	..	2,914	..	853	..	17,884	..	1,231	..
1910	451	**468**	2,917	**2,941**	1,519	**1,467**	184	**141**	40	**40**	1,096	**1,022**	2,789	**2,944**	853	**874**	17,799	**18,397**	1,231	**1,299**
*1911	451	..	2,917	..	1,519	..	184	..	..	..	1,095	..	2,788	..	852	..	18,005	..	1,231	..
*1912	462	..	2,981	..	1,518	..	447	..	..	..	1,095	..	3,153	..	943	..	17,990	..	1,445	..
*1913	473	..	3,027	..	1,492	..	447	..	..	..	1,095	..	3,183	..	882	..	18,153	..	1,445	..

* Assessed Rentals.

APPENDIX P.—*continued.*

RATEABLE VALUE OF SALMON FISHERIES, IN DISTRICTS WHERE BOARDS HAVE BEEN FORMED, FOR THE YEARS 1881 TO 1913 INCLUSIVE.

Year.	Deveron.		Don.		Doon.		Esk (North).		Esk (South).		Findhorn.		Forth.		Girvan.		Kyle of Sutherland.		Lochy.		Nairn.	
	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.
	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
Average for 5 years, 1881 to 1885 .	..	**2,477**	..	**3,247**	..	..	..	**6,211**	..	**2,431**	..	**3,617**	..	**3,868**	..	**571**	..	**2,496**	..	**1,658**	..	..
Average for 5 years, 1886 to 1890 .	..	**1,807**	..	**3,806**	..	..	..	**6,673**	..	**3,055**	..	**3,570**	..	**4,261**	..	**547**	..	**2,598**	..	**1,719**	..	..
1891 . . .	2,047	..	3,646	..	..	..	6,476	..	3,012	..	3,541	..	3,890	..	542	..	2,640	..	1,895	..	1,543	..
1892 . . .	2,071	..	3,623	..	..	..	6,519	..	3,012	..	2,501	..	3,704	..	542	..	2,665	..	1,961	..	1,343	..
1893 . . .	2,073	..	3,964	..	..	..	6,609	..	3,012	..	3,491	..	3,765	..	542	..	2,613	..	1,961	..	1,343	..
1894 . . .	2,138	..	3,743	..	..	..	6,812	..	3,002	..	3,501	..	3,806	..	554	..	2,658	..	2,122	..	1,343	..
1895 . . .	2,383	**2,142**	3,583	**3,711**	..	..	6,812	**6,645**	3,149	**3,037**	3,501	**3,507**	3,766	**3,786**	544	**544**	2,611	**2637**	2,122	**2,012**	1,136	**1,341**
1896 . . .	2,360	..	3,390	..	..	..	6,519	..	3,149	..	3,446	..	3,617	..	500	..	2,634	..	2,094	..	1,136	..
1897 . . .	2,469	..	3,383	..	..	..	6,540	..	3,149	..	3,436	..	3,616	..	524	..	2,731	..	2,115	..	1,135	..
1898 . . .	2,658	..	3,374	..	..	..	6,579	..	3,507	..	3,436	..	3,738	..	524	..	2,771	..	2,115	..	1,136	..
1899 . . .	2,979	..	3,430	..	..	..	6,523	..	3,424	..	3,436	..	3,792	..	524	..	2,838	..	2,020	..	1,136	..
1900 . . .	3,078	**2,708**	3,336	**3,382**	..	..	6,414	**6,515**	3,492	**3,342**	3,511	**3,453**	3,801	**3,712**	544	**523**	2,845	**2,763**	2,338	**2,130**	1,136	**1,136**
1901 . . .	3,186	..	3,691	..	473	..	6,510	..	3,492	..	3,527	..	3,925	..	514	..	2,890	..	2,992	..	1,136	..
1902 . . .	3,048	..	3,700	..	473	..	6,466	..	3,567	..	3,527	..	3,928	..	528	..	3,132	..	2,306	..	1,139	..
1903 . . .	3,105	..	3,646	..	486	..	6,494	..	3,552	..	3,587	..	3,731	..	553	..	2,523	..	2,300	..	1,139	..
1904 . . .	3,387	..	3,863	..	498	..	6,494	..	3,565	..	3,607	..	3,510	..	544	..	3,517	..	2,238	..	1,141	..
1905 . . .	3,369	**3,219**	4,153	**3,810**	498	**485**	6,489	**6,490**	3,590	**3,553**	3,661	**3,581**	3,513	**3,721**	549	**537**	3,515	**3,115**	2,231	**2,413**	1,219	**1,154**
1906 . . .	3,425	..	4,173	..	498	..	6,486	..	3,600	..	3,681	..	3,274	..	544	..	3,458	..	2,231	..	1,204	..
1907 . . .	3,381	..	3,946	..	513	..	6,474	..	3,674	..	3,661	..	3,491	..	534	..	3,333	..	2,880	..	1,205	..
1908 . . .	2,707	..	3,843	..	511	..	6,614	..	3,403	.	3,661	..	3,569	..	534	..	4,315	..	1,900	..	1,205	..
1909 . . .	3,193	..	3,503	..	508	..	7,621	..	3,424	..	3,697	..	3,684	..	534	..	4,524	..	2,238	..	1,205	..
1910 . . .	3,340	**3,209**	3,619	**3,817**	499	**506**	7,618	**6,963**	3,464	**3,513**	3,362	**3,612**	3,657	**3,535**	534	**536**	4,511	**4,028**	2,227	**2,295**	1,205	**1,205**
*1911 . . .	3,340	..	3,381	..	499	..	7,617	..	3,464	..	3,677	..	3,756	..	533	..	4,510	..	2,310	..	1,205	..
*1912 . . .	..	..	3,381	..	499	..	7,597	..	3,601	..	..	..	3,756	..	543	..	4,511	..	2,269	..	1,205	..
*1913 . . .	3,559	..	3,593	..	502	..	7,597	..	3,555	..	3,847	..	3,703	..	543	..	4,520	..	2,269	..	1,205	..

* Assessed Rentals.

APPENDIX P.—*continued.*

RATEABLE VALUE OF SALMON FISHERIES, IN DISTRICTS WHERE BOARDS HAVE BEEN FORMED, FOR THE YEARS 1881 TO 1913 INCLUSIVE.

YEAR.	Ness.		Nith.		Skye.		Spey.		Stinchar.		Tay.		Thurso.		Tweed.		Ugie.		Ythan.	
	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.	Annual value.	Average value for each period of 5 years.
	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
Average for 5 years, 1881 to 1885 .	..	**3,093**	..	**520**	..	..	..	**9,165**	..	..	..	**19,596**	..	..	..	**13,600**	..	**335**	..	**746**
Average for 5 years, 1886 to 1890 .	..	**3,203**	..	**464**	..	..	..	**10,207**	..	..	..	**20,504**	..	..	..	**14,158**	..	**314**	..	**834**
1891 . . .	3,366	..	443	..	..	..	9,669	..	..	..	17,820	..	..	..	14,414	..	358	..	931	..
1892 . . .	3,254	..	423	..	..	..	9,687	..	..	..	17,227	..	..	..	14,746	..	358	..	1,004	..
1893 . . .	3,253	..	756	..	..	..	9,687	..	..	..	19,008	..	..	..	14,573	..	358	..	1,004	..
1894 . . .	3,468	..	775	..	..	..	9,316	..	..	..	21,763	..	..	..	15,583	..	356	..	1,004	..
1895 . . .	3,209	**3,310**	771	**633**	..	..	9,588	**9,589**	..	..	19,587	**19,079**	..	..	15,803	**15,023**	402	**366**	1,024	**993**
1896 . . .	3,085	..	815	..	..	..	8,671	..	..	..	17,091	..	..	..	15,084	..	503	..	1,024	..
1897 . . .	3,503	..	780	..	..	..	9,638	..	..	..	17,211	..	..	..	15,444	..	504	..	1,294	..
1898 . . .	3,667	..	781	..	..	..	10,634	..	..	..	17,905	..	..	..	15,239	..	508	..	1,299	..
1899 . . .	3,510	..	775	..	..	..	11,633	..	..	..	21,048	..	..	..	15,000	..	768	..	1,299	..
1900 . . .	3,647	**3,482**	676	**765**	424	..	10,122	**10,119**	200	..	22,482	**19,147**	..	..	15,032	**15,159**	845	**625**	1,317	**1,246**
1901 . . .	3,582	..	654	..	540	..	8,608	..	400	..	22,549	..	..	..	15,005	..	839	..	1,398	..
1902 . . .	3,636	..	545	..	540	..	8,052	..	400	..	22,608	..	..	..	15,005	..	839	..	1,398	..
1903 . . .	3,516	..	554	..	540	..	8,147	..	400	..	22,648	..	..	..	15,338	..	812	..	1,389	..
1904 . . .	3,404	..	584	..	540	..	7,397	..	400	..	22,902	..	..	..	15,389	..	779	..	1,359	..
1905 . . .	3,646	**3,556**	583	**583**	540	**540**	8,365	**8,113**	400	**400**	23,069	**22,794**	..	..	15,450	**15,247**	778	**809**	1,369	**1,382**
1906 . . .	3,503	..	619	..	540	..	8,741	..	400	..	22,676	..	1,799	..	15,732	..	779	..	1,354	..
1907 . . .	3,792	..	511	..	540	..	9,135	..	400	..	23,123	..	1,799	..	16,280	..	809	..	1,352	..
1908 . . .	3,533	..	507	..	540	..	9,244	..	400	..	23,489	..	1,638	..	16,093	..	757	..	1,352	..
1909 . . .	3,680	..	509	..	200	..	9,397	..	400	..	23,716	..	1,638	..	16,130	..	789	..	1,360	..
1910 . . .	3,680	**3,638**	531	**535**	200	**404**	9,131	**9,130**	400	**400**	23,874	**23,376**	1,638	**1,702**	16,050	**16,057**	789	**785**	1,399	**1,363**
*1911 . . .	3,679	..	531	..	..	..	9,129	..	450	..	23,873	..	..	..	16,130	..	789	..	1,399	..
*1912 . . .	3,835	..	..	..	..	..	10,304	..	400	..	23,586	..	..	..	16,050	..	784	..	1,384	..
*1913 . . .	3,832	..	552	..	..	..	11,228	..	400	..	23,584	..	..	..	15,930	..	789	..	1,384	..

* Assessed Rentals.

APPENDIX Q.

ANNUAL CLOSE TIME APPLICABLE TO THE SALMON RIVERS IN SCOTLAND.

N.B.—Observe that, in the following List, the days fixing the commencement and termination of the Annual Close Time for Net-fishing and for Rod-fishing, respectively, are in all cases inclusive, as in the case of the Add, the first river in the List.

Name of River.	Annual Close Time for Net-fishing.	Annual Close Time for Rod-fishing.
Add	From Sept. 1 to Feb. 15, both days inclusive.	From Nov. 1 to Feb. 15, both days inclusive.
Aline	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Alness	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Annan	From Sept. 10 to Feb. 24.	From Nov. 16 to Feb. 24.
Applecross	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Arnisdale (*Loch Hourn*)	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Awe	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Aylort (*Kinloch*)	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Ayr	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Baa and Goladoir	From Aug. 27 to Feb. 10.	From Nob. 1 to Feb. 10.
Badachro and Kerry (*Gairloch*)	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Balgay and Shieldag	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Beauly	From Aug. 27 to Feb. 10.	From Oct. 16 to Feb. 10.
Berriedale	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Bervie	From Sept. 10 to Feb. 24.	From Nov. 1 to Feb. 24.
Bladenoch	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Broom	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Brora	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Carradale (*in Cantyre*)	From Sept. 10 to Feb. 24.	From Nov. 1 to Feb. 24.
Carron	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Clayburn, Finnisbay, Avennangeren, Strathgravat, North Lacastile, Scalladale, and Mawrig (*East Harris*)	From Sept. 10 to Feb. 24.	From Nov. 1 to Feb. 24.
Clyde and Leven	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Conon	From Aug. 27 to Feb. 10.	From Oct. 16 to Jan. 25.
Cree	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Creed or Stornoway, and Laxay (*Island of Lews*)	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Creran (*Loch Creran*)	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Croe and Shiel (*Loch Duich*)	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Dee (*Aberdeenshire*)	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Dee (*Kirkcudbrightshire*)	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Deveron	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Don	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Doon	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Drummachloy or Glenmore (*Isle of Bute*)	From Sept. 1 to Feb. 15.	From Oct. 16 to Feb. 15.
Dunbeath	From Aug. 27 to Feb. 10.	From Oct. 16 to Feb. 10.
Earn	From Aug. 21 to Feb. 4.	From Nov. 1 to Jan. 31.
Eckaig	From Sept. 1 to Feb. 15.	From Nov. 1 to Feb. 15.
Esk, North	From Sept. 1 to Feb. 15.	From Nov. 1 to Feb. 15.
Esk, South	From Sept. 1 to Feb. 15.	From Nov. 1 to Feb. 15.
Ewe	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.

Name of River.	Annual Close Time for Net-fishing.	Annual Close Time for Rod-fishing,
Fincastle, Meaveg, Ballanachist, South Lacastile, Borve, and Obb (*West Harris*)	From Sept. 10 to Feb. 24.	From Nov. 1 to Feb. 24.
Findhorn	From Aug. 27 to Feb. 10.	From Oct. 11 to Feb. 10.
Fleet (*Sutherlandshire*) .	From Sept. 10 to Feb. 24.	From Nov. 1 to Feb. 24.
Fleet (*Kirkcudbrightshire*) .	From Sept. 10 to Feb. 24.	From Nov. 1 to Feb. 24.
Forss	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 24.
Forth	From Aug. 27 to Feb. 10.	From Oct. 16 to Jan. 14.
Fyne, Shira, and Aray (*Loch Fyne*) . . .	From Sept. 1 to Feb. 15.	From Nov. 1 to Feb. 15.
Girvan	From Sept. 10 to Feb. 24.	From Nov. 1 to Feb. 24.
Glenelg	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Gour	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Greiss, Laxdale, or Thunga.	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Grudie or Dionard . .	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Gruinard and Little Gruinard	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Halladale, Strathy, Naver, and Borgie . . .	From Aug. 27 to Feb. 10.	From Oct. 1 to Jan. 11.
Helmsdale	From Aug. 27 to Feb. 10.	From Oct. 1 to Jan. 10.
Hope and Polla or Strathbeg	From Aug. 27 to Feb. 10.	From Oct. 1 to Jan. 11.
Howmore	From Sept. 10 to Feb. 24.	From Nov. 1 to Feb. 24.
Inchard	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Inner (*in Jura*) . . .	From Sept. 10 to Feb. 24.	From Nov. 1 to Feb. 24.
Inver	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Iorsa (*in Arran*) . .	From Sept. 10 to Feb. 24.	From Nov. 1 to Feb. 24.
Irvine and Garnock . .	From Sept. 10 to Feb. 24.	From Nov. 1 to Feb. 24.
Kannaird	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Kilchoan or Inverie (*Loch Nevis*)	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Kinloch (*Kyle of Tongue*) .	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Kirkaig	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Kishorn	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Kyle of Sutherland . .	From Aug. 27 to Feb. 10.	From Oct. 16 to Feb. 10.
Laggan and Sorn (*Island of Islay*)	From Sept. 10 to Feb. 24.	From Nov. 1 to Feb. 24.
Laxford	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Leven	From Aug. 27 to Feb. 14.	From Nov. 1 to Feb. 10.
Little Loch Broom . .	From Aug. 27 to Feb. 14.	From Nov. 1 to Feb. 10.
Lochy	From Aug. 27 to Feb. 14.	From Nov. 1 to Feb. 10.
Loch Duich	From Aug. 27 to Feb. 14.	From Nov. 1 to Feb. 10.
Loch Luing	From Aug. 27 to Feb. 14.	From Nov. 1 to Feb. 10.
Loch Roag	From Aug. 27 to Feb. 14.	From Nov. 1 to Feb. 10.
Lossie	From Aug. 27 to Feb. 14.	From Oct. 16 to Feb. 10.
Luce	From Sept. 10 to Feb. 24.	From Nov. 1 to Feb. 10.
Lussa (*Island of Mull*) .	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Moidart	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Morar	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Mullanageren, Horasary, and Lochnaciste (*North Uist*)	From Sept. 10 to Feb. 24.	From Nov. 1 to Feb. 24.
Nairn	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Naver and Borgie, *see* Halladale.		
Nell, Feochan, and Euchar.	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Ness	From Aug. 27 to Feb. 10.	From Oct. 16 to Feb. 1.
Nith	From Sept. 10 to Feb. 24.	From Dec. 1 to Feb. 24.
Orkney Islands (*River from Loch of Stenness*, &c.) .	From Sept. 10 to Feb. 24.	From Nov. 1 to Feb. 24.
Ormsary (*Loch Killisport*), Loch Head, and Stornoway (*Mull of Cantyre*) .	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Pennygowan or Glenforsa, and Aros . . .	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.

Name of River.	Annual Close Time for Net-fishing.	Annual Close Time for Rod-fishing.
Resort	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Ruel	From Sept. 1 to Feb. 15.	From Nov. 1 to Feb. 15.
Sanda	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Scaddle	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Shetland Islands (*River of Sandwater, &c.*) . .	From Sept. 10 to Feb. 24.	From Nov. 16 to Jan. 31.
Shiel (*Loch Shiel*) . .	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Sligachan, Broadford, and Portree (*Isle of Skye*) .	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Snizort, Orley, Oze, and Drynoch (*Isle of Skye*) .	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Spey	From Aug. 27 to Feb. 10.	From Oct. 16 to Feb. 10.
Stinchar	From Sept. 10 to Feb. 24.	From Nov. 15 to Feb. 24.
Tay (except Earn) . .	From Aug. 21 to Feb. 4.	From Oct. 16 to Jan. 14.
Thurso	From Aug. 27 to Feb. 10.	From Oct. 6 to Jan. 10.
Torridon, Balgay, and Shieldag . . .	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Tweed	From Sept. 15 to Feb. 14.	From Dec. 1 to Jan. 31.
Ugie	From Sept. 10 to Feb. 24.	From Nov. 16 to Feb. 24.
Ullapool (*Loch Broom*) .	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Urr	From Sept. 10 to Feb. 24.	From Nov. 30 to Feb. 24.
Wick	From Aug. 27 to Feb. 10.	From Nov. 1 to Feb. 10.
Ythan	From Sept. 10 to Feb. 24.	From Nov. 1 to Feb. 10.

APPENDIX R.

LIST OF CHAIRMEN AND CLERKS OF SALMON FISHERY DISTRICT BOARDS IN SCOTLAND.

District.	Name and Address of Chairman.	Name and Address of Clerk.
Alness . .	Andrew Mackenzie, Esq., Dalmore House, Alness.	William J. Duncan, Solicitor, Dingwall.
Annan . .	A. Johnstone Douglas, Esq., Comlongan Castle, Ruthwell.	J. C. R. Macdonald, 84 Irish Street, Dumfries.
Awe . .	The Duke of Argyll, Inveraray Castle, Inveraray.	Alex. MacArthur, Solicitor, Oban.
Ayr . .	Richard A. Oswald, Esq., of Auchincruive, Ayr.	C. Young, W.S., County Buildings, Ayr.
Balgay . .	C. R. Manners, Esq., C.E., 12 Lombard Street, Inverness.	Duncan Shaw, W.S., 15 High Street, Inverness.
Bervie . .	David Scott Porteous, Esq., of Lauriston, as Mandatory of the Commissioners of Woods and Forests.	W. C. Walls, Solicitor, Montrose.
Broom . .	W. Ewing-Gilmour, Esq., of Inverlael, per A. W. G. Aitken, Esq., S.S.C., Edinburgh.	W. R. T. Middleton, Solicitor, Dingwall.
Carron (W. Ross)	Baron von Schroder of Attadale.	Arthur H. Duncan, Solicitor, Dingwall.
Conon . .	John Little Mounsey, Esq., W.S., 5 Thistle Street, Edinburgh, Commissioner for Col. J. A. F. H. Stewart Mackenzie of Seaforth.	W. R. T. Middleton, Solicitor, Dingwall.
Cree . .	The Earl of Galloway, Cumloden, Newton-Stewart.	A. B. Matthews, Solicitor, Newton-Stewart.
Dee (Aberdeen)	The Lord Provost of Aberdeen.	Alex. Duffus, Advocate, Aberdeen.
Dee (Solway) .	J. Wilkinson, Esq., Mandatory for Capt. Hope, R.N., of St. Mary's Isle.	W. Nicholson, Jun., Solicitor, Kirkcudbright.
Deveron . .	C. R. Sellar, Esq., Boddam, Peterhead.	James Morrison, Solicitor, Banff.
Don . .	George Davidson, Esq., Wellwood, Aberdeen.	Alex. Duffus, Advocate, Aberdeen.
Doon . .	Marquis of Ailsa, Culzean Castle, Maybole.	C. Young, W.S., County Buildings, Ayr.
Dunbeath .	The Commissioner of Fisheries, Office of Woods, etc.	D. W. Georgeson, Solicitor, Wick.
Esk (North) .	W. Douglas Johnston, Esq. (as Mandatory for Proprietors of Morphy Fishings), Montrose.	J. R. Findlay, Solicitor, Montrose.
Esk (South) .	William Douglas Johnston, Esq., Montrose.	D. S. Campbell, Solicitor, Montrose.
Feochan . .	The Marquis of Breadalbane, Taymouth Castle, Aberfeldy.	Alex. MacArthur, Solicitor, Oban.
Findhorn . .	Sir R. C. Munro Ferguson, Bart., of Novar, per J. J. Meiklejohn, Esq., factor.	William Grant, National Bank Buildings, Forres.
Forth . .	Mandatory of Commissioners of Woods and Forests.	Henry Robb, 11 Barnton Street, Stirling.
Girvan . .	John Campbell Kennedy, Esq., of Dunure.	T. Gerald Tait, Solicitor, Girvan.
Gruinard and Little Gruinard . .	Alfred N. G. Aitken, Esq., S.S.C., Edinburgh, Factor and Commissioner for Hugh Mackenzie, Esq., of Dundonnell.	W. R. T. Middleton, Solicitor, Dingwall.
Kyle of Sutherland . .	Sir Charles Lockhart Ross., Bart., of Balnagowan.	John M'Crone, Solicitor, Dornoch.
Little Broom .	Alfred N. G. Aitken, Esq., S.S.C., Edinburgh, Factor and Commissioner for Hugh Mackenzie, Esq., of Dundonnell.	W. R. T. Middleton, Solicitor, Dingwall.

APPENDIX R.—(*continued*)—List of Chairmen and Clerks of Salmon Fishery District Boards in Scotland.

District.	Name and Address of Chairman.	Name and Address of Clerk.
Lochy . .	Thomas Allison, Factor and Mandatory for the Trustees of the late Lord Abinger, Inverlochy Castle, Fort-William.	Duncan Maclachlan, Inverlochy Estate Office, Fort-William.
Lossie . .	The Duke of Richmond and Gordon, Gordon Castle, Fochabers, per George Muirhead, Esq., Commissioner.	T. R. Mackenzie, Solicitor, Elgin.
Nairn . .	Brodie of Brodie, Brodie Castle, Forres.	H. T. Donaldson, Solicitor, Nairn.
Ness . .	Captain E. C. Ellice of Glengarry, Fort-Augustus.	Anderson & Shaw, Solicitors, Inverness.
Nith . .	John Henderson, Esq., Solicitor, Dumfries.	C. Steuart Phyn, Procurator-Fiscal, Dumfries.
Sligachan, Broadford, & Portree (Skye)	The Hon. Godfrey MacDonald, Portree.	Kenneth Macrae, Sheriff-Clerk, Portree.
Snizort, Orley, Oze, and Drynock (Skye) .	The Hon. Godfrey MacDonald, Portree.	Kenneth Macrae, Sheriff-Clerk, Portree.
Spey . .	The Duke of Richmond and Gordon, Gordon Castle, Fochabers, per George Muirhead, Esq., Commissioner.	T. R. Mackenzie and T. Gibson Strachan, Solicitors, Elgin.
Stinchar . .	The Earl of Stair, Lochinch, Wigtownshire.	Stair M'Harrie, Rephad, Stranraer.
Tay . .	The Earl of Moray, Kinfauns Castle, Perth.	Condie, Mackenzie, & Co., Solicitors, Perth.
Thurso . .	Peter Keith, Esq., Mandatory for Archibald H. M. Sinclair, Esq., of Ulbster.	David Keith-Murray, Solicitor, Thurso.
Torriden . .	C. R. Manners, Esq., C.E., 12 Lombard Street, Inverness.	Duncan Shaw, W.S., 15 High Street, Inverness.
Tweed (Police Committee of the Commissioners) .	Sir Richard John Waldie-Griffith, Bart., of Hendersyde Park, Kelso.	David W. B. Tait, W.S., Kelso.
Ugie . .	Lieut-Col. Ferguson, of Pitfour, Mintlaw.	Robert Gray, Solicitor, Peterhead.
Wick . .	Mrs. Duff Dunbar, of Hempriggs, Ackergill Tower, Wick.	D. W. Georgeson, Solicitor, Wick.
Ythan . .	Earl of Errol, Slains Castle, Aberdeenshire.	D. M. A. Chalmers, Advocate, Aberdeen.

Note.—In addition to the districts specified above, the Duke of Sutherland is sole proprietor of the districts of the following rivers, viz. :—Helmsdale, Brora, Fleet, and Laxford (under the charge of his factor, Mr. John Morrison, Dunrobin Office, Golspie); Kirkaig, Inver, and Inchard (under the charge of Alex. Taylor, Lochinver, Lairg); and the Halladale, Naver, Borgie, and Kinloch (under the charge of his factor, Mr. John Morrison, Tongue); W. E. Gilmour, Esq., of Rosehall, etc., per Mr. A. Gunn, Overseer, Durness, by Lairg, is proprietor of the rivers Dionard, Polla, Strathy, and Armadale, also in the north of Sutherland, and part owner, with the Duke of Sutherland, of the river Hope; Lord Lovat has practically sole right of fishing in the river Beauly (Mr. J. T. Garrioch, Beauly, factor); and the Countess of Cromartie is sole proprietrix of the district of the river Kannaird (under the charge of her factor, Mr. George Wetherspoon, Cromartie Estate Office, Kildary).

Fishery Board for Scotland,
Edinburgh, April 1914.

APPENDIX S.

SEALING OF SALMON BY THE FISHMONGERS' COMPANY.

The following List of Salmon, which have been Sealed by the Officers of the Fishmongers' Company, London, in order to guarantee that they were caught in the Open Season, has been kindly furnished by Sir J. Wrench Towse :—

Salmon.

Aberdeen	Scottish	614
Edinburgh	,,	43
Dundee	,,	12
Glasgow	,,	130
,,	Canadian	187
,,	Siberian	73
,,	Newfoundland	28
London	Scottish	263
,,	Irish	239
,,	Canadian	7,164
,,	Siberian	5,567
,,	B. Columbia	1,338
,,	Dutch	1
Liverpool	Scottish	19
,,	B. Columbia	1,210
,,	Canadian	9,695
,,	Siberian	163
Manchester	Canadian	32
,,	Siberian	173
,,	Norwegian	333
Leeds	Siberian	23
,,	Canadian	62
Hull	Scottish	5
,,	Danish	10
,,	B. Columbia	594
Nottingham	Scottish	8
,,	Canadian	23
Grimsby	B. Columbia	697
Cheltenham	English	19
Southampton	Irish	147
,,	Scottish	446
,,	Canadian	5
Portsmouth	Scottish	17
,,	Canadian	41
Brighton	Scottish	15
Blackpool	Canadian	49
Leicester	,,	249
Birmingham	,,	241
	TOTAL	29,935

Sealed Cases for the Continent.	Cases.
Siberian Salmon	1,888
Canadian Salmon	108
B. Columbia Salmon	5
TOTAL	2,001

Summary of Fish Sealed.

English	19
Irish	386
Scottish	1,572
Canadian	17,748
B. Columbia	3,839
Siberian	5,999
Newfoundland	28
Norway	333
Danish	10
Holland	1
TOTAL	29,935

FISHERY AND HYDROGRAPHICAL INVESTIGATIONS, 1908–1911.

FIFTH REPORT (NORTHERN AREA) ON FISHERY AND HYDROGRAPHICAL INVESTIGATIONS IN THE NORTH SEA AND ADJACENT WATERS, conducted in co-operation with the International Council for the Exploration of the Sea. 1908–1911.

I. Observations on the Plaice from the "Goldseeker" Experiments, and from the Statistics of the Aberdeen Market.

II. On the Distribution and Seasonal Abundance of Flatfishes (*Pleuronectidae*) in the North Sea, and the Fluctuations in their Abundance during the years 1901–1910.

III. On the marking of Plaice and other Fish by the S.S. "Goldseeker" during the years 1904–1909.

IV. On the Egg-production of certain Fishes.

V. Statistics of Trawled Fish landed at Aberdeen during the years 1908–1911, showing the Place and Season of Capture.

VI. On Hydrographical Investigations in the North Sea and the Faeroe Channel during the years 1909–1910.

With charts and diagrams. [Cd. 6950] of Session 1913. Price 14*s.*, post free 14*s.* 6*d.*

FISHERY BOARD FOR SCOTLAND.

BYELAWS, CLOSE SEASON ORDERS, etc., affecting the Sea and Salmon Fisheries of Scotland, in force on Sept. 30, 1913. (1913.) Price 9*d.*, post free 10*d.*

SALMON FISHERIES, 1910.

I. Infrequency of Spawning in the Salmon, as shown by the Study of the Scales of Fish caught in Fresh Water.

II. Results of Salmon Marking—seventh paper.

III. A Study of Fish received as "Mended Male Kelts."

(1911.) Price 6*d.*, post free 7*d.*

SALMON FISHERIES, 1911.

I. Infrequency of Spawning in the Salmon. (1912.) Price 3*d.*, post free 3½*d.*

II. Results of Salmon Marking—eighth paper. (1912.) Price 2*d.*, post free 2½*d.*

SALMON FISHERIES, 1912.

I. Scales of Salmon of the River Add. *With 3 Plates.* (1913.) Price 4*d.*, post free 4½*d.*

SALMON FISHERIES, 1913.

I. Salmon Research in 1913; Sea Netting Results. *With Chart.*

II. Results of Salmon Marking in Rivers—ninth paper.

III. The Spawning Mark on Salmon Scales: A Review. *With Plate.*

(1914.) Price 9*d.*, post free 10*d.*

SCIENTIFIC INVESTIGATIONS, 1909.

I. Report on Larval and later Stages of certain Decapod Crustacea. Illustrated. (1911.) Price 2*s.* 3*d.*, post free 2*s.* 4*d.*

SCIENTIFIC INVESTIGATIONS, 1910.

I. Reproductive Organs of Sparus Centrodontus, Sparus Cantharus, Sebastes Marinus, and Sebastes Dactylopterus; and on the Ripe Eggs and Larvae of Sparus Centrodontus (?) and Sebastes Marinus. (1911.) Price 1*s.* 6*d.*, post free 1*s.* 7½*d.*

II. Retardation of the Development of the Ova of the Herring. (1911.) Price 4*d.*, post free 4½*d.*

SCIENTIFIC INVESTIGATIONS, 1911.

I. Notes on some small Crustacea from the "Goldseeker" Collections. (1912.) Price 9*d.*, post free 9½*d.*

II. Report on Diseases and Abnormalities in Fishes. *With Plates.* (1913.) Price 2*s.*, post free 2*s.* 1½*d.*

SCIENTIFIC INVESTIGATIONS, 1912.

I. Eggs of certain Skates (Raia). *With Plates.* (1913.) Price 6*d.*, post free 7*d.*

II. Distribution of the Larvae of the Eel in Scottish Waters. (1913.) Price 4*d.*, post free 4½*d.*

SCIENTIFIC INVESTIGATIONS, 1913.

I. Aberdeen Trawling Statistics for Year 1912. Price 3*s.* 6*d.* (*In the press.*)

III. Spawning Areas of Sand-eels in the North Sea. *With Chart.* (1914.) Price 4*d.*, post free 4½*d.*

Results of Fish Marking Experiments. (*In the press.*)

Deep Sea Currents of the North Sea, as ascertained by means of Drift Bottles. Second Report. (*In the press.*)

SCIENTIFIC INVESTIGATIONS, 1914.

II. Distribution of Plaice Eggs in the Northern North Sea. (*In the press.*)

FISHING BOAT MOTOR ENGINES.

Report on Fishing Boat Motor Engines exhibited, etc., at the North Sea Fisheries Exhibition, Yarmouth, Nov. 1910. (1911.) Price 2*d.*, post free 2½*d.*

Do. at the Fisheries and Marine Motor Exhibition, Copenhagen, July and August, 1912. (1912.) Price 1*d.*, post free 1½*d.*

I. European Races of Herrings. A Short Résumé of the Researches into the, and the Method of Investigation. (1914.) Price 6*d.*, post free 7*d.*

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